DAWOOD MAMOON
SOHAIL PARACHA

PAKISTAN'S TRADE COMPETITIVENESS & COMPLEMENTARITIES IN SOUTH ASIA

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Pakistan's Trade Competitiveness & Complementarities in South Asia

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ISBN: 978-605-2132-87-6 (e-Book)
KSP Books 2018

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Preface - Summary

Over the past decade Pakistan remained involved in two major trade agreements with in the South Asia (Pakistan & Sri-Lanka FTA and SAFTA). It is meaningful from an operational and policy perspective to evaluate Pakistan's trade performance in South Asia against its objectives of greater trade integration and suggest policy interventions to improve its effectiveness. In order to achieve this objective, current study evaluates the Pakistan's overall and chapter-wise trade performance with SAARC major SAARC economies for the last seven years (2003-09). This study has been disaggregated into two parts: In the first part of the study, an assessment of trade performance of SAARC members is carried out with respect to the rest of the world. Pakistan's trade performance vis-à-vis other SAARC members is the focus of this part. In the second part Pakistan's trade performance in South Asia has been analyzed and policy interventions have been suggested to improve its effectiveness. Certain trade indicators like Trade Complementarity Index (TCI), Trade Specialization Index (TSI), Grubel Lloyd Index (GLI), Revealed Comparative Analysis (RCA), Bilateral Revealed Comparative Analysis BRCAs and Revealed Market Access (RMA) have been employed to achieve the above objectives.

Contents

Introduction 1
Objective of Study
Data and Methodology
Literature Review

1. SAARC's Trade Performance (World and Intra-regional trade) Comparison between World and Intra-regional Trade Shares 5
Exports Performance (World)
Exports Performance (Intra-regional)
ImportPerformance (World)
ImportsPerformance (Intra-regional)

2. Pakistan's Trade Performance in SAARC 15
Pakistan's ExportsPerformance in SAARC
Pakistan's Imports Performance in SAARC

3.Commodity Wise Share in Intra-Regional Trade (Exports and Importsof Pakistan to Major South Asian Countries) 19
Pakistan's Trade with India
Pakistan's Trade with Sri Lanka
Pakistan's Trade with Bangladesh

4.Trade Indicators Analysis (Competitiveness and Complementarities) 28
Trade Complementarily Index
TCI: Pakistan Exportto SAARC
TCI: SAARC Exports to Pakistan
Revealed Comparative Advantage
Regional Revealed ComparativeAnalysis
RevealedMarket Access
Summary of RCA, BRCAand RMA
Grubel-Lloyd Index
Intra Industry Trade between Pakistan and India
Intra Industry Trade between Pakistan and SriLanka
Intra Industry Trade between Pakistan and Bangladesh

5. Conclusion & Recommendations 49

Appendix 52

References 59

Introduction

South Asia is an important region playing a significant role in world trade. The region comprises of major economies like India, Pakistan and Sri-Lanka, whereas other economies include Bangladesh, Nepal, Maldives and Afghanistan. All these eight countries are member of South Asian Association for Regional Corporation (SAARC). The proliferation of regional trade agreements all over the world in the side lines of liberalization of international trade in the 90s created a consensus to increase trade integration among SAARC countries. This led to signing of South Asian Preferential Trading Agreement (SAPTA) in 1993. SAPTA came into force in December 1995 after the conclusion of first round of negotiations in April 1995. 1995, it was also decided to create South Asian Free Trade Area (SAFTA). In December The SAFTA agreement was signed in January 2004 among its seven partners, i.e., India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan and Maldives, and came into force in January 2006. In addition to SAFTA other bilateral trade agreements (BTA) were signed between 2003 to 2009. Pakistan Sri-Lanka BTA (2005) and India Sri-Lanka BTA are the agreements between the major economies of South Asia. Keeping in view these multilateral trade agreements and bilateral trade agreements that are enforced between SAARC countries, it is meaningful from an operational and policy perspective to evaluate Pakistan's trade performance in SAARC against its objectives and suggest policies and interventions to improve its effectiveness. At the outset, it should be mentioned that economic and non-economic impacts (whether they are small or large) of any type of trade agreement permeate the entire economy of partner countries. Trade performance as measured by various trade indicators is just one

component of economy-wide impacts. Overall, sector level growth, employment, revenue and poverty impacts are few other factors that constitute the economy-wide impacts of any trade agreement.

The current study is comprised of the following sections. Section 1 explains the brief introduction, objectives of the study, literature review and data & methodology used for the current study. Section 2 highlights the SAARC's trade performance with the world and its comparison with SAARC's Intraregional trade. Section 3 shows the Pakistan's trade performance in SAARC based on share analysis of its exports and imports. Section 4 provides the commodity-wise shares analysis of Pakistan's exports and imports with major economies of SAARC. Section 5 provides the results of certain trade indices calculated to evaluate the trade performance of Pakistan in SAARC. Section 6 concludes and provides certain recommendations for policy makers.

Objective of Study

The study provides guidelines for the private sector and government policy makers by providing a detailed import and export profiles of major products which are traded within the SAARC region by Pakistan, India, Sri Lanka and Bangladesh. The study carries out Pre and Post SAARC analysis by utilizing various indicators of trade competitiveness and highlights all those major products where each member country has witnessed a positive or negative change in its trade share.

Data and Methodology

We evaluate Pakistan's intra-regional trade performance (merchandise imports and exports) for the years 2003 to 2009. We have divided the sample time period into two sections identified as Pre and Post SAFTA periods. Pre SAFTA period is associated with 2003-06 and Post SAFTA period is associated with 2007-09. The trade data utilized in the study is at Chapter level (2-digit) as well as product level (6 digit).Bilateral trade patterns are looked at for Pakistan, India, Sri-Lanka and Bangladesh.

The main data source used for current study is the online database of www.trademap.org along with certain other additional data sources of commerce and trade. The type of analysis done majorly comprised of shares analysis and calculation of certain trade indicators and indices.

Literature Review

Regional Agreements are important frameworks to boost intra regional trade among member countries. There are many studies which look at South Asian region and prospects of intra regional

trade among its members. For example, Mehta & Kumar (2004) argued that signing of SAFTA agreement was a landmark in the evolution of SAARC since its formation in 1985. SAARC would benefit from regionalism if its cooperation would extend beyond formal trade. Dhungel (2004) noted that actual progress and achievement in implementation of SAARC agendas were considered insignificant. Jhamb (2006) supported Dhungel's view and argued that it was primarily due to the tenuous political relations between India and Pakistan and a general environment of mistrust among member countries. However, by using the Gravity Model, Rahman, *et al.* (2006) showed that elimination of trade barriers and structural rigidities originating from adverse political relationship could lead to substantial increase in intra-SAARC trade. Pitigala (2005) found that the trade structures that evolved among the South Asian countries might not facilitate a rapid increase in intraregional trade due to weak trading relations among the SAARC countries. This view was supported by a study by Baysan, (2006). He argued that the economic case for SAFTA is relatively weak. Compared to the rest of the world, this region was tiny both in terms of economic size as measured by GDP (and per capita income) and the share in the world trade. Therefore, trade preferences to the regional partners would likely be leading to a consequence of trade diversion rather than trade creation. Similarly, Das (2007) argued that evidence of trade complementarily in South Asia is mixed, so preferential trading initiative was based on a weak proposition. Recently, New Farmer & Pierola (2007) found that the arrangements of preferential trading in South Asia including SAFTA fell short of their potential because of product exemptions, special arrangements for selected products and restrictive rules for point of origin. Though upside potentials for SAFTA were great, benefits from this trading arrangement were uncertain. So, the policy makers will require relentless determination to make it successful in future.

In the literature, there exists a debate on possible gains of SAFTA. Different studies use different methodologies and computed different results. Most of the studies have examined the impact of lowering tariffs to zero under SAFTA though few other studies also examined the affect of other scenarios as well. Krueger (2004) examined that the potential gains do exists in SAFTA but for successful trade agreements, it is necessary that South Asian region must meet the theory based criteria for large welfare gains. When the comprehensive study on the regional trade is conducted, it concluded that SAFTA countries trade in similar goods with apparel and clothing being the major export item and crude oil being the major import item and large potential exists for increased

trade. The study also concluded that SAFTA could lead to growth in South Asian region. The study takes a comprehensive look at the pessimistic and optimistic predictions relating to SAFTA. The study concluded that even though this agreement would lead to growth in the South Asian region but it has limited capability to increase intra-regional or extra regional trade for its members. Baysan & Panagriya (2006) analyzed the qualitative and quantitative arguments which make SAFTA weak. In the qualitative analysis, it is seen that the economic size of the region is small as compared to the world in terms of GDP with a contribution of only 2% to world GDP of India is excluded than this size falls to only 0.4%. Therefore the possibility of most efficient member countries in the region is very small. Similarly the protection level given to the region is very high and if the country participates in the regional trade agreement than it must incur the welfare losses because of trade diversion. Another reason why SAFTA is weak is that the domestic lobbies want that the sectors which do not withstand competition must be entered in to sensitive list, so that no tariff reduction and other rules of SAFTA agreement are applied on them. Pigato (1997) and Shakur & Rae (2005) used CGE model to SAFTA and concluded that SAFTA gains are smaller than unilateral trade liberalization. Govindan (1994) examined liberalization will result in increased trade and welfare gains within the region. And in 1996, he concluded with Derosa (1996) that if liberalization is done on non-discriminatory basis than the welfare gains are larger. Raihan & Razzaque (2007) also used CGE model for the analysis and investigated if there is full implementation of SAFTA agreement than this will lead to welfare gains to Sri Lanka, India and other South Asian countries with the exception of Bangladesh because of negative trade diversion effect. Bangladesh and other LDCs in South Asia will have to increase their export share in Indian market to eliminate negative trade diversion. Kumar & Saini (2007) estimated different scenarios of SAFTA and its implications for the welfare of each economy within the region. They found that the SAFTA scenario does not result in welfare gains for all the economies in South Asia except Bangladesh. While the rest of South Asia gains about half a billion dollars, India gains by about $204 million, Sri Lanka by $89 million and Bangladesh has a welfare loss of $225 million. Gains for India and Sri Lanka are mainly due to the gains in terms of trade.

1. SAARC's Trade Performance (World and Intra-regional trade) Comparison between World and Intra-regional Trade Shares

In this section we examine and estimate the trade performance of the SAARC as a group with the World for the pre (2004-2006) and post (2007-2009) SAARC agreement time period. A comparison of SAARC's major countries trade with the world and their trade performance in the SAARC is also carried out. The main objective of this exercise is to examine whether there has been any change in the trade performance of the region with the rest of the world over sample period of time. Whereas the second objective is to make the cross comparison of SAARC's major economies global trade performance vis-à-vis, their intraregional trade performance, over the pre and post periods. The SAARC countries lagged behind in terms of openness to international trade in- spite of the fact that most of the countries have undertaken trade reforms in late 90s as compared to ASEAN countries. The intra-regional trade in SAARC is affected by political tension within the region, protectionist trade regime and large volume of informal trade. It is argued out that the region has limited complementarities that constrain expansion of intra-regional trade under free trade mechanism. Secondly it is argued that greater the extent of competitiveness among the member countries the lower is the probability of a regional agreement to succeed. Thirdly, these countries trade very little among themselves which may lead to substantial trade diversion than trade creation for some member countries within and outside South Asia region.

Comparison between world and intraregional trade shares

In this section we examine the economic performance of the SAARC to the world with its intraregional trade. Trade within the region is low when compared to its economic size in terms of GDP value and shares when comparing the SAARC trade with the world trade.

Table 1. *SAARC Average Export to World ($ US billions)*

	Pre (2003-06)	Post (2006-09)
SAARC Export to World	120.30	211.12
Average share of SAARC's exports to the World (Excluding SAARC)	94.67%	95.11%
Average share of SAARC's exports to SAARC	5.33%	4.89%

Source: Trade Map

SAARC nations trade with rest of the world much more than they trade with each other. As shown in Table 1 for pre SAARC period, 94.67% of total SAARC exports constitute exports to the rest of the world while only 5.33 % of region's total exports are within SAARC. In post SAARC period, this trend is more pronounced when 95.11% of SAARC exports are made to rest of the world but only 4.89% of these exports took place within the SAARC. The Table 2 explains the SAARC countries share in world exports; the average % shares of most SAARC countries in their world export we found that their export to rest of the world (excluding SAARC region) is almost above 90% both in pre and post periods but their contribution to intraregional export is in a single digit or having average %share below 10% during the same period respectively. In the SAARC region, Sri-Lanka stands at top contributing intraregional about 9% average share of its total exports to world in pre period, which decreased to about 7% in post period respectively. India stands second in the SAARC region, contributing intraregional about 6% average share of its total export to world in pre period, which also decreased to about 5% in post period. While Pakistan is the only country within the region where its intraregional export contribution rise in terms of average %share of its total export to world i.e. having 4% average share in pre period increased to about 5% in post period. While the Bangladesh is the only country within the region where its export contribution intraregional in terms of average % share of its total export to world during pre and post period remains almost stable which is only 2%.

Table 2. *SAARC Export to World (US $ Billions)*

Countries	Average	Average

	(2003-06)	(2007-09)
Bangladesh Total Exports	8.93	15.43
Share of Bangladesh Total Exports To World (Excluding SAARC)	98%	98%
Shares Bangladesh Exports to SAARC	2%	2%
India Total Exports	90.12	168.18
Share of India Total Exports To World (Excluding SAARC)	94%	95%
Shares India Exports to SAARC	6%	5%
Pakistan Total Exports	14.57	18.56
Share of Pakistan Total Exports To World (Excluding SAARC)	96%	95%
Shares Pakistan Exports to SAARC	4%	5%
Sri Lanka Total Exports	5.82	7.65
Share of Sri-Lanka Total Exports To World	91%	93%
Shares Sri Lanka Exports to SAARC	9%	7%

Source: Trade Map

The Table 3 explains that SAARC region imports from the world increased in pre to post periods, the average imports value of SAARC region in pre period was US $ 168.13 billion in pre period rose to an average value of about US $ 336.38 billion in post period. During pre period (2003-06) SAARC countries imports from rest of the world made up 97% of its total imports and in comparison to this SAARC imports within the region account for only 3% of its total imports. In post period (2006-09) the share of SAARC imports from rest of the world further increased to make up for 98% of total SAARC imports while SAARC imports within the region accounted for only 2%. The main reason behind these trends is increasing reliance of India and Pakistan on rest of the world for its imports.

Table 3. *SAARC Imports from World (US $ Billions)*

	Pre (2003-06)	Post (2006-09)
SAARC Export to World	168.13	336.38
Average share of SAARC's imports from the World (Excluding SAARC)	97%	98%
Average share of SAARC's imports from SAARC	3%	2%

Source: Trade Map

The Table 4 explains the performance of SAARC region global imports at dissagregated level or countrywise during pre and post period. In the SAARC region, India ranked top in importing goods from the rest of the world (excluding SAARC) both in terms of average absolute values and average % shares out of its global import but India's imports intraregionally interms of average import share out of its global import is the lowest in the region during pre and post period. Within the SAARC region Sri-Lanka is the major importing country, who imports about 19% intraregionally of its total imports from the world in pre period which increased to about 23% in post period. While out of Pakistan's total import from world about 97% of Pakistan's imports came from rest of the world

(excluding SAARC) and about 3% came from SAARC region in pre period which increased to about 4% in post period. Bangladesh is the only country within the SAARC region where its average imports share from rest of the world increased from 86% in pre period to about 95% in post period while the Bangladesh average import %share from SAARC region decreased from 14% to 5% in pre to post period.

Table 4. *SAARC Imports from World (US $ Billions)*

Countries	Average (2003-06)	Average (2007-09)
Bangladesh Total Imports	8.93	15.43
Shares Bangladesh Total Imports (Excluding SAARC)	98%	98%
Shares Bangladesh Imports from SAARC	2%	2%
India Total Imports	90.12	168.18
Shares India Total Imports (Excluding SAARC)	94%	95%
Shares India Imports from SAARC	6%	5%
Pakistan Total Imports	14.57	18.56
Shares Pakistan Total Imports (Excluding SAARC)	96%	95%
Shares Pakistan Imports from SAARC	4%	5%
Sri Lanka Total Imports	5.82	7.65
Shares Sri-Lanka Total Imports (Excluding SAARC)	91%	93%
Shares Sri Lanka Imports from SAARC	9%	7%

Source: Trade Map

Exports Performance (World)

Despite showing good economic performance, SAARC region faces array of social and economic constraints ranging from poor infrastructure, weak institutional policies, poverty, poor health, poor education, unhygienic environment and unskilled labor etc. Table 5 shows that SAARC average exports to world in terms of absolute value rise from $ US120 billion in pre period (2003-2006) to $ US 211 billion in Post period (2007-2009), and SAARC contributing in total world export with an average percentage share of 1.22% during pre period which rose to 1.52% in to post period, whereas the SAARC average percentage export growth rate decreased from 21.91% in pre period to 12.36% post period. Table 2.5 further shows the SAARC region shares in global exports and growth rates during pre and post period. In terms of absolute value SAARC global exports jumped from US $ 87 billion in 2003 to about US $ 219 billion in 2009. Since 2004, SAARC exports to the world experienced a sustained positive annual growth rate for all years except when it abruptly declined by -4.06% during 2008-09. Similarly the global exports grew with a positive growth rates except for the year 2008-2009 when it plummeted to -22.52% in 2009. The negative growth rates in global exports and global exports of SAARC region in 2008-2009 is due to the financial crises. During pre period (2003-2006) the average % share in global

export was 1.23% while for post SAARC period (2007-2009) the average share increased to 1.51%. The average percentage export growth rate of SAARC to the world has decreased during pre to post period from 21.91% to 12.36%.

Table 5. *SAARC Export to World ($ US billions)*

	Pre (2003-06)					Post (2006-09)			
	2003	2004	2005	2006	Average 03-06	2007	2008	2009	Average 07-09
SAARC Export to World	87.0	103.87	132.99	157.34	120.30	185.42	228.62	219.33	211.12
Shares	1.17	1.14	1.28	1.31	1.22	1.34	1.43	1.77	1.52
Growth		19.39	28.04	18.31	21.91	17.85	23.30	-4.06	12.36
Global Exports	7453	9121	10366	12044	9746	13829	15961	12367	14052

Source: Trade Map

Table 6 shows major SAARC countries' world export shares within the region and its growth rates for pre and post periods. India has the highest share in world exports in the region at 72.45 % in 2003 increasing up to 80.59% in 2009. For most years the export growth is above 20 % with the exception of 2009 when it was negative at -2.80%. Pakistan ranks as second in line to India in its share in world exports. Pakistan's exports to the world comprise of 13.70% of SAARC's total exports to the world in 2003. This share has declined to only 8% in 2009. Bangladesh and Sri Lanka come third and fourth in the region. Bangladesh has improved its share from 7.36% in 2003 to 7.50% in 2009. Sri Lanka share in world exports has declined to 3.24% in 2009 from 5.60% in 2003.

Table 6. *SAARC Export to World ($ US billions)*

	Pre (2003-06)					Post (2006-09)			
	2003	2004	2005	2006	Average 03-06	2007	2008	2009	Average 07-09
Bangladesh	6.40	8.27	9.33	11.70	8.92	13.14	16.69	16.45	15.43
Shares	7.36	7.96	7.02	7.43	7.44	7.09	7.3	7.5	7.3
Growth		29.11	12.87	25.35	22.44	12.36	27	-1.46	12.64
India	63.03	75.90	10..35	121.20	90.12	145.9	181.86	176.77	168.17
Shares	74.45	73.08	75.46	77.03	74.50	78.69	79.55	80.59	79.61
Growth		20.42	32.21	20.77	24.47	20.38	24.65	-2.8	14.07
Pakistan	11.93	13.38	16.05	16.93	14.57	17.84	20.28	17.55	18.56
Shares	13.71	12.88	12.07	10.76	12.36	9.62	8.87	8	8.83
Growth		12.15	19.9	5.50	12.54	5.35	13.68	-13.43	1.87
Sri Lanka	4.87	5.47	6.16	6.76	5.81	7.66	8.18	7.1	7.65
Shares	5.60	5.26	4.63	4.30	4.95	4.13	3.58	3.24	3.65
Growth		12.30	12.68	9.74	11.58	13.33	6.73	-13.4	2.31
SAARC Export to World	87.00	103.87	132.99	157.34	120.30	185.42	228.62	219.33	211.12

Source: Trade Map

Exports Performance (Intra-regional)

Table 7 provides trends for the within SAARC exports of major economies of the region during 2003-2009. The

intraregional trade within the SAARC has been growing in absolute value terms and reached up to maximum peak of about US $ 11.85 billion in 2008. During the same time period, Pakistan and India are the two main exporters to the SAARC region. Pakistani exports stood at about US$ 1.00 billion and India's exports were about US $ 9.76 billion and the combined share of exports of both countries to SAARC region is about 90.81%. If we look at the India's export share within the region, it is almost above 74 %.

Table 7. *SAARC Intraregional Exports (SAARC countries exports to SAARC)*

SAARC Countries	2003	2004	2005	2006	2007	2008	2009
Bangladesh	85.26	164.67	273.40	325.35	639.57	**	**
Shares	1.74%	2.95%	3.82%	4.18%	6.58%	**	**
India	3760.04	4411.93	5251.86	6062.12	7629.92	9765.58	6901.97
Shares	76.78%	78.96%	73.35%	77.90%	78.52%	82.37%	74.40%
Pakistan	340.97	496.03	732.07	776.60	784.37	1000.82	824.27
Shares	6.96%	8.88%	10.22%	9.98%	8.07%	8.44%	8.88%
Sri Lanka	343.76	497.28	642.39	598.90	645.04	560.29	440.67
Shares	7.02%	8.90%	8.97%	7.70%	6.64%	4.73%	4.75%
Total SAARC Intraregional Exports	4897.18	5587.67	7159.70	7781.65	9717.05	11855.8	9277.39

Source: Trade Map

Table 8 provides destination wise data for each member country's exports within SAARC region for the pre period (2003-2006). It shows that in 2003-06, India has the largest share in total SAARC exports which amounts to about 76.64% of total exports to region. Pakistan's export share in intraregional export during pre period was about 9.23% , while Sri-Lanka contributes about 8.19% and Bangladesh's share stands at 3.34%. Data shows that Bangaldesh & India are the major export partners of each other in the region. While Pakistan's and Sri-Lanka's major exports are also going to India. The data shows the domination of India in SAARC's intraregional exports.

Table 8. *SAARC Countries Intraregional Exports (2003-2006 Total)*

Reporters/Partners	Bangladesh	India	Pakistan	Sri Lanka	SAARC (As reported by exporting country)	Country's share in SAARC's Intraregional Exports
Bangladesh	0.0	581.63	214.80	41.46	848.69	3.34%
India	6653.60	0.0	2533.73	6639.71	19485.95	76.64%
Pakistan	865.14	905.97	0.0	549.50	2345.67	9.23%
Sri Lanka	57.91	1673.54	176.58	0.0	2082.33	8.19%
SAARC(As reported by importing country)	7595.50	3732.36	2926.11	7300.76	25426.20	100.00%

Tables 9 discuss destination wise export data for post SAARC period. For post period also India has the largest share in total SAARC exports which has nowincreased to 78.76%, while

on the other hand Pakistan and Sri-Lanka has its share decreased to about 8.46 % and 5.34% respectively. While the Bangladesh contribution within the region declines to 2.07%. Data shows that Bangaldesh & India are still the major export partners of each other in the region. While Pakistan's major exports are going to Bangladesh in the post time period. The table shows that except India all three other major economies of SAARC i.e. Bangladesh, and Sri-Lanka have moved their exports shares towards the rest of the world, whereas India and Pakistan have witnessed export gains within the region.

Table 9. *SAARC Countries Intraregional Exports (2007-2009 Total)*

Reporters/Partners	Bangladesh	India	Pakistan	Sri Lanka	Reporters Total	Country's share in SAARC's Intraregional Exports
Bangladesh	0.0	523.69	96.89	17.59	639.57	2.07%
India	7484.54	0.0	4812.84	7156.85	24297.48	78.76%
Pakistan	1068.97	881.66	0.0	642.26	2609.46	8.46%
Sri Lanka	71.97	1258.80	182.24	0.0	1646.00	5.34%
SAARC(As reported by importing country)	8716.59	4190.31	5093.07	7846.98	30850.28	100.00%

Source: Trade Map

Import Performance (World)

Table 2.10 shows the SAARC region shares in global imports and growth rates during pre and post period. The region's total imports from the world amounted to about US $ 109.18 billion in 2003 rising to US $ 330.62 billion in 2009; which was a slight dip from 2008 when it was US $ 395.04 billion. The comparison of table 2.1with table 2.3 explains that SAARC countries are mainly the net importer of goods. The import share of the SAARC region against the total world imports was 1.43 % in 2003 which rose to 2.61% in 2009, while the SAARC countries average import share increased from 1.65% in pre period (2003-2006) to 2.35% in post period (2007-2009). The import growth of SAARC countries from the world mostly remained above 20% since 2003 with the exception for 2009 when the import growth declined to -16.32%. Similar to the trends observed in exports, the average import growth rates of SAARC countries declined from 29.40% to 14.41% from Pre to post period respectively, while during the same period the world overall imports also showed a declining trend from 17.49% to 2.03%.

Table 10. *SAARC Imports from World(US $ Billions)*

	Pre (2003-06)					Post (2006-09)			
	2003	2004	2005	2006	Average 03-06	2007	2008	2009	Average 07-09

SAARC Export to World	109.1	138.06	189	235.9	168.13	283.44	395.09	330.62	336.39
Shares	1.43	1.47	1.78	1.93	1.65	2.01	2.41	2.61	2.35
Growth		26.45	37.16	24.59	29.4	20.15	39.3	-16.32	14.41
Global Exports	7637	9422	10641	12254	9988	14.070	16376	12650	14365

Source: Trade Map

The Table 11 explains major SAARC countries world imports value, shares and annual growth rates for the pre and post periods. Like exports, India has the highest share of world imports within the region which was about 70.71% in 2003 now increasing to about 80.58% in 2009. Pakistan ranks second within the region with world imports shares at 11.95% in 2003 which declined to 9.55% in 2009. Similarly the Bangladesh and Sri Lanka ranked third and fourth within the region with declining import shares; Bangladesh world import shares declined from 9.29% in 2003 to 5.44% in 2009, while Sri-Lanka's world imports share declined within the region from 5.97% to 2.84%. The table 2.4 suggests that India has the highest average world imports growth rate within the region during pre and post periods although the rates have declined from 32.35% in 2003-06 to 17.15% in 2007-09. This is followed, by Pakistan which has average world import growth rate of about 32.07% during pre period (2003-06) which declined to 4.59% in post period (2007-09). Similarly Bangladesh and Sri Lanka's world import growth also declined in post SAARC periods and stand at -4.77% and -31.09% in 2009 respectively.

Table 11. *SAARC Imports from World (US $ Billions)*

	Pre (2003-06)					Post (2006-09)			
Countries	2003	2004	2005	2006	Average 03-06	2007	2008	2009	Average 07-09
Bangladesh	10.15	11.37	12.63	15.69	12.46	17.62	18.88	17.98	18.16
Shares	9.29%	8.24%	6.67%	6.65%	7.71%	6.22%	4.78%	5.44%	5.48%
Growth		12.09%	11.06%	24.21%	15.79%	12.33%	7.13%	-4.77%	4.90%
India	77.20	98.98	140.86	178.21	123.81	218.65	315.71	266.40	266.92
Shares	70.71%	71.70%	74.39%	75.54%	73.08%	77.14%	79.91%	80.58%	79.21%
Growth		28.21%	42.31%	26.52%	32.35%	22.69%	44.39%	-15.62%	17.15%
Pakistan	13.05	17.95	25.10	29.83	21.48	32.59	42.33	31.58	35.50
Shares	11.95%	13.00%	13.25%	12.64%	12.71%	11.50%	10.71%	9.55%	10.59%
Growth		37.55%	39.82%	18.84%	32.07%	9.28%	29.86%	-25.38%	4.59%
Sri Lanka	6.51	7.85	8.31	9.77	8.11	11.39	13.63	9.39	11.47
Shares	5.97%	5.69%	4.39%	4.14%	5.05%	4.02%	3.45%	2.84%	3.44%
Growth		20.54%	5.79%	17.65%	14.66%	16.50%	19.70%	-31.09%	1.71%
SAARC Imports from World	109.18	138.06	189.36	235.91	168.13	283.44	395.09	330.62	336.39

Source: Trade Map

Imports Performance (Intra-regional)

Table 12 gives a detail outlook of the major SAARC ecnomies' imports within the SAARC region for the period 2003-

09. Table shows that the intraregional SAARC import stood at US $ 4.96 billion in 2003 and increased to US $ 7.10 US billion in 2009. The country wise analysis indicates that Sri-Lanka, Bangladesh and India are the bigger importers within the South Asia. Sri-Lanka ingtraregional imports rose from US $ 1.17 billion amounting to 23.68% of intraregional SAARC imports in 2003 to US$ 3.05 billion which makes up to about 40% of intraregional SAARC imports in 2008. While India's intraregional import share rose from 12.23% in 2003 to 26.98% in 2008 which amounts to about US $ 2.04 billion. Pakistan's import shares from South Asia rose from 6.34% in 2003 to 24.32% in 2008 which amounted to an increase from US $ 314 million in 2003 to about US $ 1.84 billion in 2008. For 2009, import shares have been declining for all countries.

Table 12. *SAARC Intraregional Imports (SAARC countries imports to SAARC)*

SAARC Countries	2003	2004	2005	2006	2007	2008	2009
Bangladesh	1788.27	1682.67	1540.55	2047.36	2593.72	**	**
Shares	36.01%	35.56%	27.57%	29.78%	29.43%	**	**
India	607.42	872.86	1325.31	1452.44	1636.85	2046.92	1394.97
Shares	12.23%	18.45%	23.72%	21.12%	18.57%	26.98%	19.64%
Pakistan	314.73	549.00	711.51	1246.31	1389.94	1845.14	1213.34
Shares	6.34%	11.60%	12.73%	18.13%	15.77%	24.32%	17.08%
Sri Lanka	1175.82	1490.53	1584.91	1983.35	2987.04	3054.81	1927.72
Shares	23.68%	31.50%	28.36%	28.84%	33.89%	40.26%	27.14%
Total SAARC Intr aregional Imports	4966.04	4731.57	5587.94	6876.02	8813.42	7586.82	7104.04

Table 13 shows that during pre period main importers within the SAARC region are Sri-Lanka, Bangladesh and India. Bangladesh has the largest share in total SAARC intraregional imports which is 30.39%, whereas Sri-Lanka comes second with 28.74% share followed by India with share of about 19.63%. Pakistan imports share in intraregional trade is about 13 % during the period 2003-2006.

Table 13. *SAARC Countries Intraregional Imports (2003-2006 Total)*

Reporters/ Partners	Bangladesh	India	Pakistan	Sri Lanka	SAARC (As reported by importing country)	Country's share in SAARC's Intraregionl Imports
Bangladesh	0.0	5964.29	579.41	46.51	6593.70	30.39%
India	468.13	0.0	599.60	1529.98	4258.03	19.63%
Pakistan	211.96	2372.35	0.0	219.06	2821.54	13.00%
Sri Lanka	30.17	5676.20	440.84	0.0	6234.60	28.74%
SAARC (As reported by exportin	718.51	15543.25	1632.69	2029.70	21696.40	100.00%

In Table 2.14 destination wise intraregional imports of SAARC for post period is given. Data shows that the main importers are Sri Lanka with 33.99% share, India with

21.66% share, Pakistan with 18.97% share and Bangladesh with 10.83% of total intraregional imports of the region. Comparison of pre and post time period shows that except Bangladesh all three other major economies of SAARC i.e. India, Pakistan and Sri-Lanka have showed increase in imports shares from SAARC, whereas Bangladesh showed decline in its imports share.

Table 14. *SAARC Countries Intraregional Imports (2007-2009 Total)*

Reporters/ Partners	Bangladesh	India	Pakistan	Sri Lanka	SAARC (As reported by importing country)	Country's share in SAARC's Intraregional Imports
Bangladesh		2333.89	189.12	15.65	2538.82	10.83%
India	797.52		930.82	1318.79	5078.74	21.66%
Pakistan	224.40	4038.11		181.80	4448.42	18.97%
Sri Lanka	34.54	7311.63	567.28		7969.56	33.99%
SAARC (As reported by exporting country)	1067.34	16899.88	1700.24	1674.64	23449.37	100.00%

Source: Trade Map

2. Pakistan's Trade Performance in SAARC

This section highlights the Pakistan trade performance in South Asia with major economies of India, Sri-Lanka and Bangladesh from 2003-09. Examining the existing intra regional trade flows of Pakistan not only help us to know more about the its partner economies but it also makes us aware of the challenges at present in the way for enhancing the trade flows among each other by way of finding out suitable policies for further deepening the trade integration. In this section, a brief analysis of the trade between Pakistan and SAARC members is undertaken highlighting export potential of Pakistan.

Pakistan's Exports Performance in SAARC

The Table 15 shows that Pakistan's export within the SAARC has been consistently increasing both in absolute terms as well as in percentage share. Pakistan's is one of the major trading partners within the SAARC region. The export of Pakistan to SAARC region amounted to US $ 340.97 million in 2003 which has peaked to US $ 1 billion in 2008 before it decreased to about US $ 824 million in 2009.

Pakistan exports account for 2.86% share of its global export to the SAARC region in 2003, which is now increased to 4.70% in 2009. However Pakistan's export growth rate within the SAARC region was at 45.47% in 2004 which decreased to 27.60% in 2008 before it presented a negative growth of -17.64% in 2009.

Table 15. *Pakistan Exports to SAARC (US$ Millions)*

	Pre (2003-06)			Post (2006-09)			
	2003	2004	2005	2006	2007	2008	2009
Pakistan Exports to SAARC	340.974	496.027	732.07	776.597	784.37	1000.82	824.27
Pakistan Exports to SAARC (Growth)		45.47%	47.59%	6.08%	1.00%	27.60%	-17.64%
Pakistan Exports to World	11930	13379.02	16050.2	16932.8	17838.4	20279	17554.7
Pakistan Exports to SAARC (Share in Pakistan's Total Exports to the World)	2.86%	3.71%	4.56%	4.59%	4.40%	4.94%	4.70%

Source: Trade Map

Table 16 elaborates that Pakistan's major export destinations within SAARC region are Bangladesh, India and Sri-Lanka. Pakistan's highest export share destination within the SAARC region is Bangladesh, where exports increased from US $ 166 million in 2003, to a highest level of US $ 422 million in 2008 before they decreased to US $ 367 million in 2009. Pakistan's second major export destination in the SAARC region is India, where the exports increased from US $ 83 million in 2003 to US $ 235 million in 2009. Similar trends are seen in Pakistan's trade with Sri-Lanka, where trade with Sri-Lanka increased from US $ 83 million in 2003 to a highest peak of US $ 216.96 million in 2009.

Table 16. *Pakistan Exports to SAARC ($ US Millions)*

	Pre (2003-06)			Post (2006-09)			
Countries	2003	2004	2005	2006	2007	2008	2009
Bangladesh	166.24	197.66	234.41	266.84	279.25	422.34	367.38
Shares	48.75%	39.85%	32.02%	34.36%	35.60%	42.20%	44.57%
Growth		18.90%	18.60%	13.83%	4.65%	51.24%	-13.01%
India	83.55	158.50	337.22	326.70	291.70	354.64	235.32
Shares	24.50%	31.95%	46.06%	42.07%	37.19%	35.43%	28.55%
Growth		89.71%	112.76%	-3.12%	-10.72%	21.58%	-33.64%
Sri Lanka	83.53	134.72	153.66	177.60	208.57	216.72	216.96
Shares	24.50%	27.16%	20.99%	22.87%	26.59%	21.65%	26.32%
Growth		61.28%	14.06%	15.58%	17.44%	3.91%	0.11%
Pakistan Exports to SAARC	340.97	496.03	732.07	776.60	784.37	1000.82	824.27

Source: Trade Map

Pakistan export share with respect to its total export in SAARC for Bangladesh and Sri Lanka markets during 2003 were 48.75% and 24.50%; while in 2009 it was decreased to 44.57% for Bangladesh and increased to about 26.32% for Sri Lanka. Similarly Pakistan's export share in Indian market showed a positive trend which increased from 24.50% in 2003 to 28.5% in 2009.

Pakistan's Imports Performance in SAARC

Table 17 shows Pakistan's total imports from SAARC and its share in Pakistan's total imports from the world. Pakistan imports from SAARC countries in pre period amounted US $ 314 million in 2003 which accounts to about 2.41% share of Pakistan' global imports. Pakistan's import from the SAARC region in 2008 amounted to US $ 1.84 billion which was about 4.36% of Pakistan's global imports. However the share has been decreased to 3.84% in 2009.

Table 17. *Pakistan's Imports from SAARC($ US Millions)*

	Pre (2003-06)			Post (2006-09)			
	2003	2004	2005	2006	2007	2008	2009
Pakistan Imports from SAARC	314.74	549.00	711.52	1246.29	1389.95	1845.13	1213.33
Shares	2.41%	3.06%	2.84%	4.18%	4.26%	4.36%	3.84%
Growth		74.43%	29.60%	75.16%	11.53%	32.75%	-34.24%
Pakistan's Import from World	13048.61	17948.58	25096.58	29825.75	32593.94	42326.57	31583.72

Source: Trade Map

Pakistan's bilateral imports with major SAARC countries are explained in table 18. In terms of bilateral imports, major share of Pakistan's imports come from India, which is worth about US $ 1691 million in 2008 and constitute to about 4.0% of Pakistan's global imports and 91.67% of Pakistan's total imports from SAARC region during the same period. In 2003 Pakistan's import from India in terms of absolute value was US $ 226.25 million which has been increased to about US $ 1080.40 million in 2009. Pakistan's imports from Bangladesh and Sri Lanka are also increased from US $ 42.91 million and US $ 43.25 million in 2003 to US $ 76.12 million in 2009 and US $ 55.79 million in 2009 respectively. But in terms of import share from the SAARC region, Pakistan's import share declined in case of Bangladesh from 13.63% in 2003 to 6.27% in 2009 and in case of Sri Lanka from 3.74% in 2003 to 4.60% in 2009.

Table 18. *Pakistan's Imports from SAARC($ US Millions)*

	Pre (2003-06)	Post (2006-09)

Countries	2003	2004	2005	2006	2007	2008	2009
Bangladesh	42.91	45.08	68.09	55.89	62.34	85.95	76.12
Shares	13.63%	8.21%	9.57%	4.48%	4.48%	4.66%	6.27%
Growth		5.05%	51.04%	-17.92%	11.54%	37.89%	-11.44%
India	226.25	454.41	576.70	1114.99	1266.23	1691.47	1080.40
Shares	71.88%	82.77%	81.05%	89.46%	91.10%	91.67%	89.04%
Growth		100.85%	26.91%	93.34%	13.56%	33.58%	-36.13%
Sri Lanka	43.25	45.66	59.18	70.97	59.79	66.21	55.79
Shares	13.74%	8.32%	8.32%	5.69%	4.30%	3.59%	4.60%
Growth		5.57%	29.61%	19.93%	-15.75%	10.74%	-15.74%
Pakistan Imports from SAARC	314.74	549.00	711.52	1246.29	1389.95	1845.13	1213.33
Shares	2.41%	3.06%	2.84%	4.18%	4.26%	4.36%	3.84%
Growth		74.43%	29.60%	75.16%	11.53%	32.75%	-34.24%
Pakistan's Import from World	13048.61	17948.58	25096.58	29825.75	32593.94	42326.57	31583.72

Source: Trade Map

3. Commodity Wise Share in Intra-Regional Trde (Exports and Imports of Pakistan to Major South Asian Countries)

In this section, commodity wise export and import share of the SAARC members with Pakistan has been calculated. This analysis is done at HS 2digit level for all the 99 products. This analysis will throw light on the new emerging products in post period (2007-09) as compared to pre period (2003-06). Similarly, it will also help to understand the increased shares of the products as compared to pre period.

Pakistan's Trade with India

India and Pakistan are the two largest economies in South Asia. Together, they account for 90% of the gross domestic product (GDP) and 85% of the population of the region. In 2007/8, the share of total trade in goods between Pakistan and India was less than 0.5% of their combined trade with the rest of the world. The abysmally low level of Pakistan-India bilateral trade is the result of border disputes and political tensions, but also of inward-looking import-substitution growth strategies.

This has rendered South Asia among the least integrated economic region in the world. Between 1980 and 2005, intraregional trade as a share of total trade within South Asia only rose from 3 to 4%, whereas in East Asia (a region of comparable size in population and GDP) intraregional trade more than doubled from 6 to 11 %. It is striking that over the same period, South Asia's worldwide exports grew from only $12 billion to $126 billion (a 10-fold increase) while East Asia's jumped from $48 billion to over $1 trillion (a 20-fold increase).

Trade between India and Pakistan is tiny compared to the potential, which by estimates could be as high as US$10 billion or

2% of the combined merchandize trade with the world. Starting from mid 1980's to late 1980's, economies of Pakistan and India introduced economic liberalization programs. This include, opening international Trade and Investment, deregulation of initiation of privatization, tax reforms and inflation controlling measures. As far as India is concerned, fruits of liberalization reached to the peak in 2007 as India recorded highest GDP growth rate of 9% and as a result became the second fastest growing economy of the World. According to the World Bank India still faces challenges in public sector reforms, infrastructure, agricultural and rural development, reforms in lagging states, and in dealing with the impact of HIV/AIDS. There is also considerable room for more wide-ranging and deeper reforms in the trade and investment regimes as well.

While in case of Pakistan, due to economic liberalization, the average tariffs fell from 70% in 1980 to 30% in 2001 and 14.68% in 2008. Measures that have restricted trade were also eliminated by the Government which includes regulatory duties and para tariffs. The GDP growth rate had jumped from 6.4% in 2003-04 to 8.6% in 2004-05 and 6.6% in 2008-09.

Despite the overall economic liberalization and globalization in both India and Pakistan, the bilateral trade relations have been highly "managed". When the two countries started the Composite Dialogue Process in January 2004, there has been a sizable increase in bilateral trade.

Official trade between India and Pakistan reached US$1.1 billion in 2005-06. According to our estimates for 2004-05, there was an additional $545 million in unofficial trade. Thus, total bilateral trade stood at $1.5billion, or 3.4 percent of Pakistan's total trade, in 2005-06. Total Indo Pak trade shows a mixed trend 2007 onwards. In 2007 total trade was valued at US$ 1.5 billion which rose to US$ 2.04 billion in 2008 but fell back sharply to US$ 1.3 billion in 2009. Pakistan's exports to India in the period show a similar trend with 2007 exports reaching US$ 291 million then rising to a peak of US$ 354 million in 2008 before falling to US$ 235 million in 2009. Pakistan's imports also follow this pattern with 2007 imports from India valued at US$ 1.2 billion, rising to their highest level of US$ 1.6 billion in 2008 before falling back to US$ 1.08 billion in 2009.

Bilateral trade between Pakistan and India had been limited to a few goods with almost no trade in services. The composition of Indian imports from Pakistan before during 2000-2004 was limited to about six commodity groups, which on average accounted for more than 80 percent of total exports. These included edible vegetables and roots; sugar and confectionary;

edible fruits; gum/resins and vegetable extracts (e.g. molasses); and products of milling industry. Since 2004, after Pakistan and India have begun wide ranging dialogue on political and economic issues, the composition of Pakistani exports to India has become more diversified. In addition to the traditional exports to India mentioned above, mineral fuels and oils; vegetable plaiting materials; organic and inorganic chemicals; raw hides and skins; lead and articles made of lead; and salt/sulphur/cement have also been exported to India. The composition of official exports from India to Pakistan is broader, reflecting India's more diversified industrial base. Organic chemicals form the biggest share of Pakistani imports from India. Another major import to Pakistan from India has been of ores/slag (mainly iron ore). During the last five years (2004 to 2009) imports of pharmaceutical products; mineral fuels/oils; man-made filaments; plastic products; rubber products; leather; and copper and copper products have become important. Periodically, agricultural products (e.g. raw cotton, wheat, silk, and sugar) have accounted for one-time imports or exports to meet domestic shortages in either country. The percentage shares of the exported commodities to India from Pakistan have been calculated in table 19 at HS 2-digit level for pre and post scenarios.

Table 19. *Shares of Items Exported to India: Pre and Post Analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'27	Mineral fuels, oils, distillation products, etc	39%	'27	Mineral fuels, oils, distillation products, etc	27%
'07	Edible vegetables and certain roots and tubers	17%	'52	Cotton	18%
'08	Edible fruit, nuts, peel of citrus fruit, melons	15%	'08	Edible fruit, nuts, peel of citrus fruit, melons	14%
'52	Cotton	11%	'25	Salt, sulphur, earth, stone, plaster, lime and cement	12%
'29	Organic chemicals	3%	'29	Organic chemicals	4%
'17	Sugars and sugar confectionery	3%	'41	Raw hides and skins (other than furskins) and leather	4%
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	1%	'78	Lead and articles thereof	3%
'51	Wool, animal hair, horsehair yarn and fabric thereof	1%	'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	2%
'41	Raw hides and skins (other than furskins) and leather	1%	'10	Cereals	2%
'84	Machinery, nuclear reactors, boilers, etc	1%	'39	Plastics and articles thereof	2%

Exports of resource based raw form products have increased to India and even the value-added items are exported in post period which are reflective of Pakistan's increased

comparative advantage. Shares of the exported commodities that are Cotton (HS 52) which basically includes Cotton not carded or combed and Twill woven fabrics, Raw hides and skins and leather (HS 41) including leather parchment dressed of whole hides or skins or of strips and Hides and skins of bovine and equine animals and Organic Chemicals (HS 29) includes ethylene dichloride and Phythalic anhydride which are used for PVC production have increased in post period analysis. Similarly the shares of the commodities Mineral fuels, oils, distillation products, etc (HS 27) and Edible fruit, nuts, peel of citrus fruit, melons (HS 08) has gone down.

Similarly, the shares of the imported commodities by Pakistan from India has been calculated at HS 2-digit level in table 20 to see whether Pakistan is now importing more value added products or importing the primary commodities.

Table 20. *Shares of Items Imported from India: Pre and Post Analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'29	Organic chemicals	33.4%	'29	Organic chemicals	30.2%
'26	Ores, slag and ash	8.7%	'52	Cotton	20.5%
'39	Plastics and articles thereof	8.7%	'23	Residues, wastes of food industry, animal fodder	7.0%
'23	Residues, wastes of food industry, animal fodder	7.8%	'07	Edible vegetables and certain roots and tubers	6.8%
'17	Sugars and sugar confectionery	7.3%	'39	Plastics and articles thereof	5.5%
'52	Cotton	7.0%	'26	Ores, slag and ash	3.7%
'40	Rubber and articles thereof	6.1%	'72	Iron and steel	2.8%
'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	3.3%	'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	2.6%
'09	Coffee, tea, mate and spices	2.6%	'40	Rubber and articles thereof	2.5%
'72	Iron and steel	2.3%	'84	Machinery, nuclear reactors, boilers, etc	2.3%

In the above mentioned scenario, the story comes out to be relatively stable in post period analysis. Basically Pakistan becomes more dependent on Cotton (HS 52) as the share of imports from India has increased to 20% from 7%. The products which Pakistan is mainly importing from India under this product category are Cotton, not carded or combed (HS 520100), Cotton yarn (HS 5205 and all the products under this category). Data shows that Plastics (HS 39) and Rubber (HS 40) imports have decreased. Shares of Cotton (HS 52) and Edible vegetables and certain roots and tubers (HS 07) which basically include Onions (HS 070310), Garlic (HS 070320), Tomatoes (HS 070200), Chickpeas (HS 071320), Beans (HS 071339) and Potatoes (HS 070190) have increased.

Pakistan and Sri Lanka have good economic and trade relations. Exports of Pakistan to Sri Lanka increased from $83 million in 2003 to $208 million in 2007 to $216.963 million in 2009. And the imports from Sri Lanka increased from $43 million in 2003 to $55 million in 2009. Balance of trade when calculated is in favor of Pakistan as the exports from Pakistan showed the increase of 198%and imports of Pakistan from Sri Lanka showed the increase of 116%. Trade expansion between the countries took place in agro-based products which includes sugar production, sea food processing, value added textiles and clothing, tea and plantation, electronics, metal fabrication and light engineering, pharmaceutical products, preservation and canning of fruits and vegetables. Currently Pakistan receives 0.6% of Sri Lankan exports and Sri Lanka receives 0.7% of Pakistanis exports. Pakistan is an important market for tea, copra, rubber, betel leaves and tamarind and Sri Lanka is an important market for textiles, pharmaceuticals, machinery and agricultural items.

Following FTA which came into operation on June 30, 2005, bilateral trade between both the countries has been strengthened through an increase in the number of products that they can now import from each other. Under FTA, both Pakistan and Sri Lanka have granted duty free access to each other on several tariff lines, agreeing to eliminate custom tariff on almost 90% of products by June 2010.Resultantly, Pakistan has now become the second largest trade partner for Sri Lanka in the South Asian region. Under FTA, both the countries have agreed to a 35% domestic value addition and change of tariff heading at a six digit level, which provides flexibility for Sri Lankan and Pakistani investors to source their inputs from third countries and export manufactured products to each other. Pakistan has granted TRQs to Sri Lanka, on an annual basis, on 10,000 metric tons of tea at zero rate of duty and 1,200 metric tons of betel leaves at a preferential margin of 35 per cent against the pre-2005 import duty of Rs.150 per kilo. Before 2005, Sri Lanka exported about 3,000 metric tons of tea to Pakistan and the annual TRQ of 10,000 metric tons enabled Sri Lankan tea trade to make a fresh start. Likewise, TRQ on betel leaves has resulted in enhancing the income of betel growers in the rural areas of Sri Lanka. Pakistan also granted Sri Lanka TRQs for 3 million pieces of apparel products, covering 20 categories where there was market potential without restrictions regarding the fabric's country of origin. The apparel categories also qualify for 35% preferential tariff margin. In addition, Sri Lankan ceramic tiles and tableware also enjoy 20% of preferential tariff margin. Sri Lanka has granted to Pakistan TRQs for duty free exports of

Kino and 6,000 metric tons of long grade basmati rice, in addition to 1,000 metric tons of potatoes per annum. The percentage shares of the exported and imported commodities by Pakistan to Sri-Lanka have been estimated at HS 2-digit level in tables 21 and 22.

Table 21. *Shares of Items Exported to Sri Lanka: Pre and Post Analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'52	Cotton	52%	'52	Cotton	45%
'10	Cereals	7%	'10	Cereals	9%
'03	Fish, crustaceans, molluscs, aquatic invertebrates	5%	'07	Edible vegetables, certain roots and tubers	7%
'30	Pharmaceutical products	4%	'60	Knitted or crocheted fabric	6%
'63	Other made textile articles, sets, worn clothing	4%	'73	Articles of iron or steel	4%
'39	Plastics and articles thereof	4%	'30	Pharmaceutical products	4%
'73	Articles of iron or steel	4%	'25	Salt, sulphur, earth, stone, plaster, lime and cement	3%
'07	Edible vegetables and certain roots and tubers	3%	'63	Other made textile articles, sets, worn clothing etc	3%
'54	Manmade filaments	2%	'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	3%
'60	Knitted or crocheted fabric	2%	'09	Coffee, tea, mate and spices	2%

In Pakistan-Sri Lanka analysis, shares of the commodities that are Edible vegetables and certain roots and tubers (07) including tomatoes, potatoes, onions and garlic etc and knitted or crocheted fabric (60) and have increased while the shares of Coffee, tea, mate and spices (09) has also increased. And the shares of cereals (10) mainly rice, pharmaceutical products (30), other made textile articles, sets, worn clothing etc (63) which includes bed, table, toilet linens, fish, crustaceans, mollusks, and aquatic invertebrate's nes (03) have gone down over the period (2003-2009).

Table 22. *Shares of Items Imported from Sri Lanka: Pre and Post analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'40	Rubber and articles thereof	24.5%	'40	Rubber and articles thereof	37.1%
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc,	23.8%	'12	Oil seed, oleagic fruits, grain, seed, fruit,	16.3%

'09	Coffee, tea, mate and spices	13.9%	'14	Vegetable plaiting materials, vegetable products nes	12.4%
'14	Vegetable plaiting materials, vegetable products	10.4%	'08	Edible fruit, nuts, peel of citrus fruit, melons	11.8%
'08	Edible fruit, nuts, peel of citrus fruit, melons	8.1%	'09	Coffee, tea, mate and spices	8.4%
'44	Wood and articles of wood, wood charcoal	3.9%	'44	Wood and articles of wood, wood charcoal	2.1%
'39	Plastics and articles thereof	1.9%	'54	Manmade filaments	1.7%
'89	Ships, boats and other floating structures	1.8%	'53	Vegetable textile fibres nes, paper yarn, woven fabric	1.2%
'88	Aircraft, spacecraft, and parts thereof	1.2%	'25	Salt, sulphur, earth, stone, plaster, lime and cement	1.2%
'53	Vegetable textile fibers, paper yarn, woven fabric	1.0%	'39	Plastics and articles thereof	1.0%

Rubber and articles thereof is the major importing product of Sri Lanka in post period analysis, therefore we can say that their imports are more dependent on Rubber. Share of this product line has also increased from 24% to 37% in post period average shares. Similarly the import of Betel leaves (HS140490) has also increased from 8% to 12% when compared with the average shares in pre SAFTA period. Imports of Copra oil (HS 120300), Tea (hs 090240), Nutmeg (HS 090810), Black pepper (HS 090411) and Fiber Board (HS 441121).

Pakistan's Trade with Bangladesh

During the 8th meeting of Joint Economic Committee (JEC) held in Dhaka on 12-13 September 2005, Pakistan and Bangladesh both decided to increase the bilateral trade to US $1 billion by 2007. It has increased from about US $147 million in 2002 to US $279 million in 2007 and by the end of 2009. the trade between the two countries was $367 million. Major imports from Bangladesh to Pakistan include tea, jute, medical and pharmaceutical products. There is a duty free import of Bangladeshi tea by Pakistan. There are also prospects for the development and establishment of direct shipping service between the two countries in order to promote commercial and trade links. Efforts to expand technical cooperation in various fields were identified by Joint Working Group. In 2006, four MoUs on cooperation in areas of agriculture, tourism, promotion of trade, and product standardization and quality assurance were signed during the visit of Begum Khaleda Zia, Prime Minister of Bangladesh to Pakistan. There are MoUs signed between Pakistan Agriculture Research Council, Ministry of Food, Agriculture & Livestock and Bangladesh Agricultural Research Council. Both countries have also signed MoUs on tourism.

The percentage shares of the exported and imported commodities by Pakistan to Bangladesh have been estimated at HS 2-digit level in tables 23 and 24.

Table 23. *Shares of Items Exported to Bangladesh: Pre and Post Analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'52	Cotton	75%	'52	Cotton	78%
'54	Manmade filaments	3%	'84	Machinery, nuclear reactors, boilers, etc	4%
'84	Machinery, nuclear reactors, boilers, etc	3%	'17	Sugars and sugar confectionery	2%
'87	Vehicles other than railway, tramway	2%	'10	Cereals	2%
'07	Edible vegetables and certain roots and tubers	2%	'55	Manmade staple fibres	2%
'39	Plastics and articles thereof	2%	'87	Vehicles other than railway, tramway	1%
'41	Raw hides and skins (other than furskins) and leather	2%	'39	Plastics and articles thereof	1%
'55	Manmade staple fibres	1%	'41	Raw hides and skins (other than furskins) and leather	1%
'60	Knitted or crocheted fabric	1%	'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	1%
'17	Sugars and sugar confectionery	1%	'38	Miscellaneous chemical products	1%

When shares are calculated for the pre and post periods, it indicates that the shares of the commodities for example, Cotton (52) which includes cotton yarn (HS 5205 and all the HS 6 codes it comprises), woven cotton fabrics and cotton not carded (HS 5209 and all the HS 6 codes it comprises), Machinery, nuclear reactors & boilers (84) including Fans (HS 841451), Textile Machines (HS 8445 and all the HS 6 codes it comprises), Manmade staple fibers (55) Woven fabrics of synthetic fibers (HS 5513, HS 5514, HS 5512 and all the HS 6 codes they comprise), yarn of synthetic staple fiber (HS 550953). Similarly the shares of the commodities raw hides and skins and leather (41), manmade filaments (54), plastics (39) and vehicles other than railway, tramway (87) have gone down. These are mainly one off exports with trade taking place in different products, sometimes only in 1 year.

Table 24. *Shares of Items Imported from Bangladesh: Pre & Post analysis*

Codes	Description	Pre (2003-06)	Codes	Description	Post (2006-09)
'53	Vegetable textile fibres nes, paper yarn, woven fabric	66%	'53	Vegetable textile fibres nes, paper yarn, woven fabric	74.00%
'09	Coffee, tea, mate and spices	20%	'09	Coffee, tea, mate and spices	12.08%
'31	Fertilizers	5%	'94	Furniture, lighting, signs,	5.06%

				prefabricated buildings	
'14	Vegetable plaiting materials, vegetable products nes	2%	'24	Tobacco and manufactured tobacco substitutes	3.30%
'72	Iron and steel	1%	'14	Vegetable plaiting materials, vegetable products nes	0.81%
'30	Pharmaceutical products	1%	'84	Machinery, nuclear reactors, boilers, etc	0.56%
'84	Machinery, nuclear reactors, boilers, etc	1%	'63	Other made textile articles, sets, worn clothing etc	0.49%
'24	Tobacco and manufactured tobacco substitutes	1%	'72	Iron and steel	0.45%
'39	Plastics and articles thereof	1%	'61	Articles of apparel, accessories, knit or crochet	0.35%
'96	Miscellaneous manufactured articles	0%	'58	Special woven or tufted fabric, lace, tapestry etc	0.31%

For Bangladesh imports from Pakistan, new products have entered the market in post period. These are Articles of apparel, accessories, knit or crochet (HS 61) which includes T-shirts, singlets and vests etc (HS 610990), Special woven or tufted fabric, lace, tapestry etc (HS 58) mainly includes Labels and badges (HS 580790 and HS 580710). Although the share of these products is very low that is 0.35% and 0.31%, but in post period these products come in the top ten imports of Pakistan from Bangladesh as compared to pre period. Shares of Coffee (HS 09), Iron (HS 72)and pharmaceutical products (HS 30) have decreased, as pharmaceutical products were there in the pre period top ten imports but in post period there share has decreased and as a result they are not in the top ten imported products from Bangladesh now. The possible reason could be the increase in local consumption of Bangladesh, whereas the other possible reason could be the development of domestic industry in Pakistan.

4. Trade Indicators Analysis: (Competitiveness and Complementarities)

In this section the Pakistan's trade performance with major SAARC countries is analyzed. The analysis is based on certain trade indices used in the literature i.e. TCI, TSI, RCA, BRCA, RMA and GL-Index. The indices analysis is done at two digit chapter level for the years 2003-09.

Trade Complementarily Index

In this section we calculated the overall Trade complementarity index for Pakistan with Bangladesh, India, Sri Lanka and SAARC region (as a whole) for 2003 to 2009. The indices are calculated on the basis of export and import profiles of some selected SAARC countries. The index tells us how well a country's export supply fits into the import demand of its trading partners. The higher TCI overtime indicates that the region is able to fulfill intraregional demand or supply of goods and indicates more favorable prospect for a successful trade cooperation arrangement between the countries. Trade complementarity index measures how well does the export profile of one country, or group of countries, match with the import profiles of others. Also, changes in the value of trade complementarity index over time can help determine whether the trade profiles of the countries (under consideration) are growing more or less compatible (Yeats and Ng 2003).Yeats and Ng (op.cit) had argued that similarities between the types of goods exported and the goods imported by East Asian countries was a strong factor underlying the expansion of their intra-regional trade. Some of the main proponents of this index, such as, Michaely (1994), had used the index to evaluate

prospects for Latin American trade arrangements, whereas Yeats (1998) had applied the index to analyze the compatibility of intra-regional trade in Sub-Saharan African countries. Das (2007) finds that evidence of trade complementarily in South Asia is mixed, so preferential trading initiative was based on a weak proposition.

The Trade complementarity in simple words defined as sum of the absolute value of the difference between the import category shares and the export shares of the countries under study divided by two and multiplied by 100 converts the index into percentage form. In the present analysis of SAARC countries, Trade Complementarity between two countries or regions i and j (Cij) can be defined as,

$$Cikj, = [1 - \Sigma (|Mik - Xij| / 2)] \times 100 \quad (1)$$

$$(eq\ 1)\ Cijk, = [1 - \Sigma (|Mij - Xik| / 2)] \times 100 \quad (2)$$

Where k = a SAARC country; j = SAARC country or region; i represents product category; Xij is the share of product i in the exports of country j; and Mik is the share of product i in the imports of country k. The Trade Complementarity Index is a measure of potential trade between two partners by comparing the export profile of country j to the import profile of country k. The index is zero when no goods are exported by one country or imported by the other/partner country and 100 when the exports and imports share exactly match. In the index logic, trade complementarity between two partners is considered to be high, when the products imported by country k are the same than the ones exported by country j. However, the TCI has an inherent size bias, i.e. a subregion whose export portfolio is limited (or smaller than other subregions) will end up with having a low TCI value.

TCI: Pakistan Export to SAARC

The trade complementarity indices for Pakistan with selected South Asian countries are computed in two ways i.e. Pakistan with Bangladesh, India, Sri Lanka and SAARC region vis-à-vis of selected partners exports complementarity with Pakistan. This computation is based on Trade Map data at HS-2 digit level (99 chapters) for two time periods i.e. pre-period (2003-2006) and post- period (2007-2009) in order to explore out that at what degree export of Pakistan should match with the imports of its Partner country or SAARC region as a whole and the expansion of intraregional trade within South Asia region overtime. Also this analysis will give us an overview whether exports and import profiles within the region are growing

more compatible over time or less compatible, or to appraise the change in the potential for intraregional trade in this region over the 2003 to 2009 period.

Table 25 shows the trade complementarity indices of Pakistan's exports to Bangladesh, India, Sri-Lanka and SAARC region as a whole over the period 2003 to 2009. For instance in 2009 Pakistan's complementarity indices in terms of its exports have shown a sharp increase with the selected regional trade partners and SAARC as a region since 2003, only with the exception of Bangladesh where its complementarity indices almost remained constant over time. The exports complementarity between Pakistan and India rose from 13.59 percent in 2003 to 20.65 percent in 2009 but to a lower extent than those between Pakistan and Sri Lanka (which increased from 27.17 percent in 2003 to 35.20 percent in 2009), whereas between Pakistan and Bangladesh (which remained stagnant at almost 37 percent since 2003 to 2009 but is highest in both time periods in the region). However, Pakistan's trade complementarity in terms of its exports with SAARC region as a whole rose from 18.62 percent in 2003 to 24.25 percent in 2009.

Table 25. *TCI: Pakistan Export to SAARC*

Year	TCI for Pakistan's Exports to Bangladesh	TCI for Pakistan's Exports to India	TCI for Pakistan's Exports to Sri Lanka	TCI for Pakistan's Exports to SAARC Region as whole
2003	37.77225	13.59727	27.17567	18.62773
2004	38.31013	15.56111	29.67247	20.73545
2005	36.38853	17.32047	30.64509	21.53354
2006	32.47474	16.78718	29.27754	20.74127
Pre-Average (2003-06)	36.23641	15.81651	29.19269	20.4095
2007	39.48677	19.8505	30.24649	23.51039
2008	40.67802	20.57264	32.87863	24.12924
2009	36.91237	20.65627	35.20846	24.25344
Post-Average (2007-09)	39.02572	20.3598	32.77786	23.96436

Source: Trade Map "Author's own calculations"

Figure 5.1 shows that there has been an inclining trend in Pakistan's complementarity indices as an exporter and other selected countries as an importer's during pre (2003-07) and post period (2007-2009). Furthermore, in terms of average TCI value of Pakistan as an exporter to other countries in the region has improved in the selected pre and post time periods and is highest for Bangladesh at 39.02 percent, followed by Sri Lanka

and India at 32.77 percent and 20.35 percent respectively in post period (2007-2009). Similarly, Pakistan's average trade complementarity indices in terms of its exports with SAARC region as a whole has also improved from 20.40 percent in pre period (2003-2006) to 23.96 percent in Post period (2007-09).

From this analysis, it can be observed that Pakistan's exports show the maximum complementarity with the imports of other regional trading partners. Thus Pakistan's exports have an ability to fulfill to a certain extent; the regions imports demand of goods, in particular for those of Bangladesh and Sri Lanka.

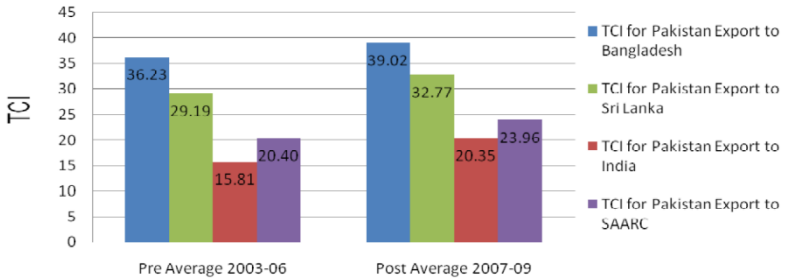


Figure 1. TCI for Pakistan Export to SAARC
Source: Trade Map

TCI: SAARC Export to Pakistan

Table 26 shows that there has been a decline in Pakistan's complementarity indices as an importer with selected countries like Bangladesh and Sri Lanka but show inclining trend among India and SAARC region (as a whole) as an exporters. However, SAARC region as an exporter, Pakistan's imports complementarity has increased from 43.08 percent in 2003 to 50.33 percent in 2009. Whereas India's complementarity indices in terms of its exports increased from 48.73 percent in 2003 to 55.78 percent in 2009, which remained highest in the selected time periods. The other two countries that are Bangladesh and Sri Lanka's exports show low complementarity with Pakistan's imports. Bangladesh exports complementarity indices against Pakistan decreased from 6.30 percent in 2003 to 5.58 percent in 2009, while Sri Lanka exports complementarity decreased from 18.30 percent in 2003 to 15.62 percent in 2009.

Table 26. *TCI: Pakistan Export to SAARC*

Year	TCI for Bangladesh's Exports to Pakistan	TCI for India's Exports to Pakistan	TCI for Sri Lanka's Exports to Pakistan	TCI for SAARC's Exports to Pakistan
2003	6.301881	48.73541	18.30392	43.08382
2004	8.33792	52.30668	19.9701	46.7178
2005	10.53293	53.26074	20.36631	47.15581
2006	9.37292	56.55237	19.81374	49.87008
Pre-Average (2003-06)	8.636414	52.7138	19.61352	46.70688
2007	12.24659	58.31481	20.16836	51.73328
2008	6.506085	60.94548	15.90374	56.21553
2009	5.588512	55.78094	15.62013	50.33506
Post-Average (2007-09)	8.113728	58.34707	17.23074	52.76129

Source: Trade Map "Author's own calculations"

Figure 2 shows in terms of average TCI values that there has been an inclining trend in Pakistan's complementarity indices as an importer or other selected countries as an exporter during pre (2003-07) and post period (2007-2009). Furthermore, in terms of average TCI values, India is the only country where complementarity indices in terms of its exports to Pakistan rose from 52.71 percent in Pre-period (2003-06) to 58.34 percent in Post-period (2007-09). Whereas Sri Lanka and Bangladesh's average trade complementarity indices in terms of their exports to Pakistan decreased from 19.61 percent to 17.23 percent and 8.63 percent to 8.11 percent respectively in the Pre and Post Periods.

While on the other hand SAARC region's (as a whole) average trade complementarity indices in terms of its exports to Pakistan improved from 46.70 percent in pre period (2003-2006) to 52.76 percent in post-period (2007-09). The overall observed pattern of result might seem consistent due to the fact that impact of Pakistan's complementarity in imports from India is much higher than countries like Bangladesh and Sri Lanka's, where their exports show low complementarity with Pakistan's imports during pre and post period.

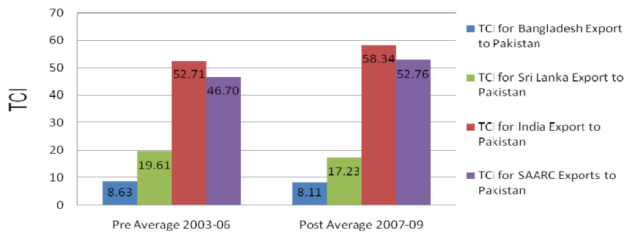


Figure 2. *TCI for SAARC Exports to Pakistan*

Revealed Comparative Advantage

The Revealed Comparative Advantage (RCA) measure is:

$$RCA = \left(\frac{X_{i,world}^{Pakis\,tan}}{\sum_i X_{i,world}^{Pakis\,tan}} \right) \div \left(\frac{X_{i,world}^{world}}{\sum_i X_{i,world}^{world}} \right)$$

It gives us an indication of how much a country (Pakistan) is exporting a given good relative to how much the world is exporting that same good. A country is said to have a revealed comparative advantage when its share of export of a given good exceeds the equivalent share of export of the world. This is captured when the numerator is bigger than the denominator, or equivalently when the RCA is above 1, meaning that a given country exports, proportionally to its total exports, more than the share of exports of the world in that given product. An RCA below 1 indicates that a country does not have a revealed comparative advantage in a given good or equivalently that the world share of that given product is higher than that of the country under analysis. One always has to view this measure with certain degree of caution as it will invariably be affected by trade policy. RCAs tend to be calculated at the highest level of disaggregation possible, in our study at 6-digit level. This is done to try to capture product specific comparative advantages.

The top 10 Revealed Comparative Advantages (RCAs) of Pakistan at 2-Digit chapter level in pre and post time period are given in the table 27. The top 10 RCAs are calculated on average basis for the pre and post period. The table shows that Pakistan is having strong revealed comparative advantages in other made textiles (‘63), cotton (‘52) and carpets etc (‘57) in the pre time period with RCA values of 59, 44 and 15 respectively. Whereas in the post period Pakistan maintains strong revealed comparative advantage in other made textiles (‘63), cotton (‘52) and cereals (‘57) with RCAs of 55, 53 and 16 respectively. Out of total 97 reported chapters Pakistan is having RCA greater than 1 in 28 chapters (List of chapters is given in Annex - I) in the pre period (average 2003-06), whereas in the post period (average 2007-09) RCA of 31 chapters (List of chapters is given in Annex - II) is greater than 1.

Table 27. *Top 10 average RCAs*

Code	Product label	RCA	Code	Product label	RCA
'63	Other made textile articles, sets, worn clothing etc	58.56	'63	Other made textile articles, sets, worn clothing etc	54.74
'52	Cotton	43.80	'52	Cotton	52.95
'57	Carpets and other textile floor coverings	15.04	'10	Cereals	16.28
'10	Cereals	13.38	'42	Articles of leather, animal gut, harness, travel goods	11.25
'42	Articles of leather, animal gut, harness, travel goods	11.47	'57	Carpets and other textile floor coverings	10.25
'61	Articles of apparel, accessories, knit or crochet	8.93	'41	Raw hides and skins (other than furskins) and leather	9.70
'41	Raw hides and skins (other than furskins) and leather	7.13	'25	Salt, sulphur, earth, stone, plaster, lime and cement	9.18
'11	Milling products, malt, starches, inulin, wheat gluten	6.77	'61	Articles of apparel, accessories, knit or crochet	8.00
'54	Manmade filaments	5.97	'55	Manmade staple fibres	7.94
'36	Explosives, pyrotechnics, matches, pyrophorics,	5.86	'62	Articles of apparel, accessories, not knit or crochet	5.84

The comparison of top 10 RCAs of Pakistan and Pakistan's top 10 exports to South Asia reveals that out of Pakistan's top 10 exports to South Asia only four chapters (52, 10, 54, and 63) comes under the top 10 chapters having highest RCAs for the pre period. Whereas in the post time period out of Pakistan's top 10 exports to South Asia only four chapters (52, 25, 10 and 41) comes under the top 10 chapters having highest RCAs. This analysis leads to the recommendation that Pakistan can take advantage of the chapters in which it has high revealed comparative advantage and they do not come under the top exports of Pakistan to SAARC. Table 5.9 shows that the highest Revealed Comparative Advantage in pre and post both time period is achieved by chapter '63 (Other made textile articles, sets, worn clothing etc) with RCAs of 59 and 55 for the pre and post time period respectively.

Table 28 reports the top 10 chapters that have achieved the highest positive RCA growth from pre to post time period. For each period the RCA value is calculated on average basis. Table shows that chapters '97 (Works of art, collectors pieces and antiques) has achieved the maximum positive growth in RCA and achieved the RCA value from 0.01 in pre period to 0.39 in post period (Although the RCA value still remains less than 1). Table 29 reports the top 10 chapters that showed the maximum negative growth in RCA. The table shows that the maximum negative growth is achieved by chapter '31 (Fertilizers). It is important to mention that the above given growths are presented for only those chapters that have RCA value in all the sample periods.

Table 28. *Chapters that achieved highest positive growth in RCA from pre to post time period.*

Code	Product label	RCA Value Pre (2003-06)	RCA Value Post (2007-09)
'97	Works of art, collectors pieces and antiques	0.01	0.39
'71	Pearls, precious stones, metals, coins, etc	0.09	0.63
'75	Nickel and articles thereof	0.00	0.01
'25	Salt, sulphur, earth, stone, plaster, lime and cement	1.98	9.18
'78	Lead and articles thereof	0.34	1.35
'43	Furskins and artificial fur, manufactures thereof	0.01	0.03
'26	Ores, slag and ash	0.25	0.67
'55	Manmade staple fibres	3.03	7.94
'02	Meat and edible meat offal	0.22	0.53
'48	Paper & paperboard, articles of pulp, paper and board	0.04	0.10

Table 29. *Chapters that achieved highest negative growth from pre to post time period*

Code	Product label	RCA Value Pre (2003-06)	RCA Value Post (2007-09)
'31	Fertilizers	0.16	0.01
'91	Clocks and watches and parts thereof	0.03	0.00
'99	Commodities not elsewhere specified	0.02	0.00
'46	Manufactures of plaiting material, basketwork, etc.	0.16	0.03
'18	Cocoa and cocoa preparations	0.04	0.01
'54	Manmade filaments	5.97	1.56
'40	Rubber and articles thereof	0.20	0.06
'29	Organic chemicals	0.16	0.06
'11	Milling products, malt, starches, inulin, wheat gluten	6.77	3.01
'45	Cork and articles of cork	0.01	0.00

Regional Revealed Comparative Analysis

The measure that we use to analyze the trade flows is the Regional RCA of Pakistan with SAARC. This measure is calculated using the following equation:

$$RCA_{BIL} = \left(\frac{X^{SA}_{i,Pakis\tan}}{\sum_i X^{SA}_{i,Pakis\tan}} \right) \div \left(\frac{M^{World}_{i,SA}}{\sum_i M^{World}_{i,SA}} \right)$$

The bilateral RCA can be seen as a modified RCA, where rather than having the world as the reference point, we compare the export shares of a given country (Pakistan) in a particular destination market (SAARC), to the export shares of the world in that same destination market, across all product lines. Hence the bilateral RCA gives us an indication of how much a given country is exporting to a given market relative to how much the world is exporting to that market. A bilateral RCA above one will tell us for that particular good that

Pakistan has a revealed comparative advantage in the SAARC market.

The top 10 chapters with Regional Revealed Comparative Advantage (RRCA) of Pakistan with respect to SAARC for the pre and post period are given in table 30. The top 10 RRCAs are calculated on average basis for pre and post periods. The table shows that Pakistan has strong regional reveled comparative advantage in cotton (’52), fish (’03) and other made textiles (’63) in the pre period (average values 2003-06) with RRCA values of 29, 21 and 16 respectively. Whereas in the post period (average values 2007-09) Pakistan has high RRCAs in Cotton (‘52), arms & ammunition (‘93) and other made textiles (’63) with values of 48, 42 and 18 respectively. Chapter ’93 (Arms and ammunition) is ranked at 2nd position for the post period because it has highest RRCA in the year 2008 that is 116. The given high value of RRCA for chapter ‘93 is achieved by Pakistan’s due to rising exports that account to 5 million to Sri-Lanka in 2008. Out of 97 reported chapters, Pakistan has RRCA greater than 1 in 30 chapters (List of chapters is given in Annex - III) during the pre period, whereas in the post period Pakistan has RRCA greater than 1 in 37 chapters (List of chapters is given in Annex - IV). The highest RRCA in both the pre and post period is achieved by chapter ’52 (Cotton) with RRCA values of 29 in the pre period and 48 in the post period.

Table 30. *Top 10 average RRCAs*

Top 10 average RRCAs in Pre-period (2003-06)			Top 10 average RRCAs in Post-period (2007-09)		
Code	Product label	RRCA	Code	Product label	RRCA
'52	Cotton	29.29	'52	Cotton	48.26
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	21.19	'93	Arms and ammunition, parts and accessories thereof	41.93
'63	Other made textile articles, sets, worn clothing etc	15.98	'63	Other made textile articles, sets, worn clothing etc	18.40
'07	Edible vegetables and certain roots and tubers	10.61	'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	17.45
'08	Edible fruit, nuts, peel of citrus fruit, melons	10.47	'41	Raw hides and skins (other than furskins) and leather	12.13
'61	Articles of apparel, accessories, knit or crochet	8.45	'08	Edible fruit, nuts, peel of citrus fruit, melons	11.70
'13	Lac, gums, resins, vegetable saps and extracts nes	5.12	'20	Vegetable, fruit, nut, etc food preparations	8.64
'41	Raw hides and skins (other than furskins) and leather	4.90	'61	Articles of apparel, accessories, knit or crochet	8.15
'10	Cereals	4.61	'10	Cereals	7.96
'17	Sugars and sugar confectionery	4.15	'11	Milling products, malt, starches, inulin, wheat gluten	7.16

Table 31 reports the top 10 chapters that have achieved the highest positive RRCA growth from pre to post period. The

RRCA values are calculated on average basis from 2003 to 2009. The table reports that the maximum positive growth in RRCA is achieved by chapter'43 (Furskins and artificial fur, manufactures thereof) from 0.04 in pre period to 5.63 in post period. Table 32 shows the top 10 chapters that have achieved the maximum negative growth in RRCA from pre to post period. The maximum RRCA negative growth is achieved by Chapter'53 (Vegetable textile fibres nes, paper yarn, woven fabric) from 0.15 in pre period to zero in the post period. The above given growths are presented for only those chapters that have RRCA value in all the sample period.

Table 31. *Chapters that achieved highest positive growth in RRCA from pre to post time period.*

Code	Product label	RRCA Value Pre (2003-06)	RRCA Value Post (2007-09)
'43	Furskins and artificial fur, manufactures thereof	0.04	5.63
'93	Arms and ammunition, parts and accessories thereof	0.39	41.93
'88	Aircraft, spacecraft, and parts thereof	0.01	0.19
'92	Musical instruments, parts and accessories	0.02	0.57
'75	Nickel and articles thereof	0.00	0.08
'25	Salt, sulphur, earth, stone, plaster, lime and cement	0.39	6.05
'05	Products of animal origin, nes	0.14	1.56
'22	Beverages, spirits and vinegar	0.72	6.79
'15	Animal,vegetable fats and oils, cleavage products, etc	0.00	0.00
'06	Live trees, plants, bulbs, roots, cut flowers etc	0.08	0.65

Table 32. *Chapters that achieved highest negative growth in RRCA from pre to post time period*

Code	Product label	RRCA Value Pre (2003-06)	RRCA Value Post (2007-09)
'53	Vegetable textile fibres nes, paper yarn, woven fabric	0.15	0.00
'66	Umbrellas, walking-sticks, seat-sticks, whips, etc	0.04	0.00
'01	Live animals	0.03	0.00
'31	Fertilizers	0.01	0.00
'02	Meat and edible meat offal	0.00	0.00
'97	Works of art, collectors pieces and antiques	0.71	0.01
'91	Clocks and watches and parts thereof	0.14	0.00
'99	Commodities not elsewhere specified	0.04	0.00
'81	Other base metals, cermets, articles thereof	0.03	0.00
'18	Cocoa and cocoa preparations	1.04	0.10

Revealed Market Access

This measure allows exploring market access issues by extension of RCA analysis and helps to asses by product that whether there is any evidence that the Pakistani access to the SAARC market is higher or lower than that suggested by its revealed comparative advantage. RMA measure (RMA1) is derived from the combination of the RCA and the bilateral RCA and is calculated as follows.

$$RMA1_{i,k} = RCA_{BIL} / RCA$$

Where i represent a tariff code (industry or product) and k represents the destination market. The intuition behind this is that the bilateral trade should follow global comparative advantage thus a country should gain entry into a given market following its comparative advantage and following the demand that there will be for the given good in that market. To calculate the RMA1, simply divide the bilateral RCA of a given country by the global RCA of that country. An RMA below 1 shows that a given good is not entering the target market at the rate that would be expected according to its global revealed comparative advantage. An RMA above 1 tells us that the market access for the given good is above that which would be suggested by the indicator of global revealed comparative advantage. Where the indicator is less than one, this could be an indication of market access barriers in the SAARC for Pakistani products, in comparison to other exporters to the SAARC. However, it could also be driven by other factors such as differences of tastes and preferences. Similarly, where the indicator is greater than one, then this suggests that relative to other exporters to the SAARC, and relative to its revealed comparative advantage Pakistan has better access. This could be an indication, for example, of deeper integration and niche specialization between Pakistan and the SAARC in that particular product, but equally it could be driven by other factors such as differences in tastes. The top 10 Revealed Market Access (RMAs) values of Pakistan at 2-Digit chapter level for the pre and post period are given in the tables 33. The top 10 RMAs are calculated on average basis in each sample period. The table shows that Pakistan is having strong reveled market access in works of art (’97), vehicles other than railway (’87) and cocoa & cocoa preparations (’18) in the pre period with RMA values of 104, 25 and 22 respectively. In the post period Pakistan is having strong revealed market access in furskins and artificial fur (’43), arms and ammunition (’93) and live trees (’06) with RMA values of 202, 71 and 22 respectively. The results of RMA analysis show that out of 97 reported chapters Pakistan is having RMA greater than 1 in 48 chapters (List of chapters is given in Annex - V) during the pre period, whereas in the post period Pakistan is having RMA greater than 1 in 54 chapters (List of chapters is given in Annex - VI). The chapters that are having RMA results greater than 1 show that the market access for these chapters is above than that which would be suggested by the indicator of global revealed comparative advantage.

Table 33. *Top 10 average RMAs*

Top 10 average RMAs in Pre-period (2003-06)			Top 10 average RMAs in Post-period (2007-09)		
Code	Product label	RMA	Code	Product label	RMA
'97	Works of art, collectors pieces and antiques	104.0	'43	Furskins and artificial fur, manufactures thereof	202.0
'87	Vehicles other than railway, tramway	25.55	'93	Arms and ammunition, parts and accessories thereof	71.45
'18	Cocoa and cocoa preparations	21.74	'06	Live trees, plants, bulbs, roots, cut flowers etc	22.41
'30	Pharmaceutical products	17.79	'20	Vegetable, fruit, nut, etc food preparations	22.10
'19	Cereal, flour, starch, milk preparations and products	15.14	'87	Vehicles other than railway, tramway	11.76
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	12.59	'30	Pharmaceutical products	11.47
'20	Vegetable, fruit, nut, etc food preparations	11.07	'80	Tin and articles thereof	10.99
'91	Clocks and watches and parts thereof	10.09	'51	Wool, animal hair, horsehair yarn and fabric thereof	9.45
'80	Tin and articles thereof	9.16	'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	8.75
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	8.26	'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	8.51

Table 34 reports the top 10 chapters that have achieved the highest positive RMA growth on average basis from pre to post period, whereas table 5.17 reports the chapters that have achieved the maximum negative growth in RMA from pre to post period. The highest RMA growth is achieved by Chapter '43 (Furskins and artificial fur, manufactures thereof) and maximum negative growth is achieved by chapter '66 (Umbrellas, walking-sticks, seat-sticks, whips, etc). It is important to mention that the above given growths are presented for only those chapters that are having RMA value in all the sample years.

Table 34. Chapters that achieved highest positive growth in RMA from pre to post time period

Code	Product label	RMA Value Pre (2003-06)	RMA Value Post (2007-09)
'43	Furskins and artificial fur, manufactures thereof	1.73	202.07
'93	Arms and ammunition, parts and accessories thereof	1.69	71.45
'88	Aircraft, spacecraft, and parts thereof	0.03	1.28
'92	Musical instruments, parts and accessories	0.04	1.09
'05	Products of animal origin, nes	0.06	0.70
'89	Ships, boats and other floating structures	0.05	0.56
'22	Beverages, spirits and vinegar	0.60	4.75
'15	Animal,vegetable fats and oils, cleavage products, etc	0.00	0.00
'06	Live trees, plants, bulbs, roots, cut flowers etc	2.90	22.41
'11	Milling products, malt, starches, inulin, wheat gluten	0.51	3.30

Table 35. *Chapters that achieved highest negative growth in RMA from pre to post time period*

Code	Product label	RMA Value Pre (2003-06)	RMA Value Post (2007-09)
'66	Umbrellas, walking-sticks, seat-sticks, whips, etc	0.73	0.00
'53	Vegetable textile fibres nes, paper yarn, woven fabric	0.12	0.00
'01	Live animals	0.04	0.00
'31	Fertilizers	0.03	0.00
'02	Meat and edible meat offal	0.01	0.00
'91	Clocks and watches and parts thereof	10.09	0.43
'97	Works of art, collectors pieces and antiques	104.06	5.59
'19	Cereal, flour, starch, milk preparations and products	15.14	1.09
'71	Pearls, precious stones, metals, coins, etc	0.06	0.01
'13	Lac, gums, resins, vegetable saps and extracts nes	0.89	0.18

Summary of RCA, BRCA and RMA

Similar to the trends in Pakistan's overall exports to the world, Pakistan's exports to the SAARC region are dominated by the cotton industry. Table 36 and 37 shows Pakistan's top 10 exports to SAARC at 2-Digit Chapter level along with their RCA, BRCA and RMA values for the pre and post periods respectively.

Table 36. *Top 10 chapters on average share-wise in 2003-06 with their average indices values*

Code	Product label	Shares in SAARC	RCA	RRCA	RMA
'52	Cotton	46%	43.80	29.29	0.66
'27	Mineral fuels, oils, distillation products, etc	15%	0.28	0.51	1.76
'07	Edible vegetables and certain roots and tubers	7%	1.40	10.61	6.43
'08	Edible fruit, nuts, peel of citrus fruit, melons	5%	1.54	10.47	6.82
'10	Cereals	2%	13.38	4.61	0.39
'39	Plastics and articles thereof	2%	0.42	1.07	2.54
'54	Manmade filaments	2%	5.97	3.70	0.77
'63	Other made textile articles, sets, worn clothing etc	2%	58.56	15.98	0.27
'17	Sugars and sugar confectionery	2%	2.91	4.15	1.33
'29	Organic chemicals	2%	0.16	0.49	3.09

The table 36 shows that 46% of Pakistan's export to the SAARC in the pre time period is covered by the cotton industry (Chapter '52). Whereas other major exports include Mineral fuels (Chapter '27), edible vegetables (Chapter '07) and edible fruits (Chapter '08) with shares in total exports to SAARC for the pre period are 15%, 7% and 5% respectively.

The table further shows the average RCA, RRCA and RMA for the same top 10 products for the pre period. The RCA column shows that other than the chapter '27 (Mineral fuels, oils, distillation products, etc),'29 (Organic chemicals) and '39 (Plastics and articles thereof) all other chapters contain RCA that is greater than 1. The results reveal that chapter '27 (Mineral fuels, oils, distillation products, etc) has average RCA valued at 0.28 but it has a major share (15%) in Pakistan's exports to SAARC. Whereas chapter '63 (Other made textile articles,

sets, worn clothing etc) and '10 (Cereals) have high positive RCAs of 59 and 13 but their shares account for only 2% and 2% in Pakistan's total exports to SAARC. This shows that in pre period globally Pakistan is not able to take advantage by exporting in those chapters that have high RCAs.

The next column in the table shows that RRCA of the chapters '27 (Mineral fuels, oils, distillation products, etc) & '29 (Organic chemicals) is less than 1, whereas these two same chapters also had the RCA less than 1 during 2003-06.

The last column shows the RMA of top ten chapters with maximum share in Pakistan's exports to SAARC. The results show that out of top 10 chapters six of them show RMA greater than one and the other show RMA lesser than one. In the top ten chapters highest RMA is achieved by chapter '08 (Edible fruit, nuts, peel of citrus fruit, melon) that is 6.82. The result implies that out of top 10 products six of them are entering the target market (SAARC) at the rate that is expected according to their global revealed comparative advantage where as the other four chapters fail to enter the SAARC region as suggested by their global revealed comparative advantage.

Table 37. *Top 10 chapters on average share-wise in 2007-09 with their average indices values*

Code	Product label	Shares in SAARC	RCA	RRCA	RMA
'Total	All products				
'52	Cotton	49%	52.95	48.26	0.91
'27	Mineral fuels, oils, distillation products, etc	10%	0.34	0.29	0.83
'25	Salt, sulphur, earth, stone, plaster, lime and cement	5%	9.18	6.05	0.62
'08	Edible fruit, nuts, peel of citrus fruit, melons	5%	1.77	11.70	6.69
'10	Cereals	4%	16.28	7.96	0.49
'41	Raw hides and skins (other than furskins) and leather	2%	9.70	12.13	1.25
'07	Edible vegetables and certain roots and tubers	2%	1.08	2.46	2.41
'84	Machinery, nuclear reactors, boilers, etc	2%	0.10	0.20	1.91
'60	Knitted or crocheted fabric	2%	2.09	6.41	3.07
'39	Plastics and articles thereof	1%	0.46	0.69	1.46

The table 37 shows that 49% of Pakistan's export to the SAARC is covered by the cotton industry ('52) in the post time period. Whereas other major exports include Mineral fuels ('27), Salt, sulphur, earth, stone, plaster, lime and cement ('25), edible fruits ('08) and cereals ('10) with shares equal to 10%, 5%, 5% and 4% respectively.

The RCA column shows that other than the chapters '27 (Mineral fuels, oils, distillation products, etc), '84 (Machinery, nuclear reactors, boilers, etc) and '39 (Plastics and articles thereof) all other chapters from top 10 exports show RCA greater than 1. The results reveal that chapter '27 (Mineral fuels, oils, distillation products, etc) has average RCA of only 0.34 but it

has a major share of 10% (although decreased from 15% in pre period) during the post period in Pakistan's exports to SAARC. Whereas chapters'10 (Cereals) and '41 (Raw hides and skins (other than furskins and leather) have RCAs of 16 and 10 but their shares are as low as 4% and 2% respectively in Pakistan's total exports to SAARC. This shows that Pakistan is not taking full advantage of its export potential by exporting in those chapters to SAARC where it has gretare comparative advantage globally..

The next column in the table shows that RRCA values for the top 10 exports of Pakistan to SAARC in the post period. The table shows that the RRCA of chapters '27 (Mineral fuels, oils, distillation products, etc), '84 (Machinery, nuclear reactors, boilers, etc) & '39 (Plastics and articles thereof) is less than 1, whereas these three chapter also had the RCA less than 1.

The last column shows the RMA of top 10 chapters with maximum share in Pakistan's exports to SAARC. The results show that out of top 10 chapters 4 of them show RMA greater than 1 and the other show RMA lesser than 1. In the top 10 chapters, highest RMA is achieved in chapter'08 (Edible fruit, nuts, peel of citrus fruit, melon) valued at 6.69 that was similar to pre period value. The result implies that out of top 10 products 4 of them are entering the target market (SAARC) at the rate that is expected according to their global revealed comparative advantage where as the other 4 chapters failed to enter the SAARC region as suggested by their global revealed comparative advantage.

Grubel-Lloyd Index

An increase in the volume of trade can be caused either by changes in the pattern of comparative advantage (inter-industry trade) or by increasing product differentiation with scale economies (intra-industry trade). With many economies in the world following different paths of industrialization, it is likely that at certain point of time they specialize in different export items in accordance with what their comparative advantage dictates. However, it is also likely that, with "convergence" in their income level, trade patterns become increasingly complementary among the economies that compete with one another in similar export items.

Trade due to product differentiation with increasing returns to scale (IRS) plays an important role in explaining trade between countries particularly when the differences in factor proportions are not very large. So any measure of intra-industry trade (or inter-industry trade) must somehow reflect how these two alternative forms of trade are combined to generate the actual trade

data. The GL index is a standard indicator of measuring the share of intra-industry trade from a data set composed of both homogeneous and differentiated goods. This index is calculated from the share of intra-industry trade in total trade. It measures the degree of intra-industry trade due to product differentiation with scale economies, which indicates how a country import and export simultaneously varieties of a particular product. Expressed as the ratio of intra-industry trade (two-way trade within industries) to total trade (sum of intra-industry trade and inter-industry trade).The Grubel-Lloyd (GL) index is a widely used indicator measuring the extent of intra industry trade as opposed to that of inter-industry trade. It is an aggregate indicator, summed up over every country pairs on all goods traded. The GL index sorts out the amount of trade flows a pair of countries simultaneously import and export. At the same time when the country exports or imports goods and services of similar type, then the Intra-trade arises. There are two types of intra industry trade:

a. Horizontal Intra-Industry trade

When the country exports or imports goods and services which are of the same sector and are at the same stage of processing, this is known as horizontal intra-industry trade.

b. Vertical Intra-Industry trade

When the country exports and imports goods and services which are of the same sector but at different stages of processing, this is known as vertical intra-industry trade.

Grubel Lloyd (1975) introduced an index to calculate intra-industry trade (IIT) and nowadays this is the most frequently used method. This index is named as Grubel-Lloyd Index. According to Grubel and Lloyd', when there is a difference in level of technology and human capital in products with same input requirements then this type of trade takes place. The GL index has been formulated to measure global trading pattern between two countries. The GL Index is calculated as:

$$GL_{\text{sector i}} = 1 - (| \text{Export}_{\text{sector i}} - \text{Import}_{\text{sector i}} | / \text{Export}_{\text{sector i}} + \text{Import}_{\text{sector i}})$$

If the country only imports or only exports goods or services within the same sector, such that there is no intra-industry trade, the second term on the right hand side of equation is equal to 1, such that the whole expression reduces to 0. Similarly, if the export value is exactly equal to the import value, than the second term on the right hand of the equation is equal to 0, such that the whole expression reduces to 1. For simplicity we multiplied by

100, therefore GL Index varies between 0 and 100.0 indicates pure inter industry trade and 100 indicates pure intra industry trade.In calculating the GL index, individual observations on bilateral trade flows among countries are classified into two different data sets, the intra-industry and inter-industry sets. Some observations whose export and import values are identical are deemed to belong to the intra-industry trade set. Other observations whose export and import values are not identical are regarded as belong to the inter-industry trade set. We calculate the GL-Index between Pakistan and its SAARC partners at the HS 2 digit level and compare the pre period (2003) values with post period (2009) values and the empirical analysis is also shown to see whether the intra-industry trade is horizontal or vertical.

Our analysis reveals that the extent of intra industry trade between Pakistan and other SAARC countries is low and that the production systems of the region are not as integrated as that of other trading blocs like ASEAN. In the case of ASEAN the economies are highly integrated as they are a part of the global supply chain for high technology products. Trade between SAARC and Pakistan is concentrated mainly in agricultural and semi processed products which are then used for local consumption.

Intra Industry Trade between Pakistan and India

The GL Index identifies 11 chapters (at the HS 2 digit level) that are having GL-Index values greater than 50% in either pre or post time period. These chapters are listed in the table 38:

Table 38. *Intra Industry Trade between Pakistan and India*

HS Chapter	Description	Pre Period (2003)	Post period (2009)
12	Oil seed, oleagic fruits, grain, seed, fruit, etc	73.72%	63%
13	Lac, gums, resins, vegetable saps & extracts	81.89%	12%
28	Inorganic chemicals, precious metal compound, isotopes	0%	87%
29	Organic chemicals	-	14%
52	Cotton	-	48%
74	Copper and articles thereof	20.45%	74%
84	Machinery, nuclear reactors, boilers, etc	80.23%	6%
85	Electrical, electronic equipment	41.03%	4%
90	Optical, photo, technical, medical, etc apparatus	46.81%	55%
95	Toys, games, sports requisites	96.23%	68%
96	Miscellaneous manufactured articles	82.80%	7%

In the post period Pakistan has moved towards intra industry trade in 5 products out of 11 products whereas in the remaining 6 products intra industry trade has declined and they are moving towards inter industry trade.

A more detailed empirical analysis at the HS 6 digit level is carried out for the chapters that are having more than 100

thousand trade value in either of the sample period (2003 or 2009) to reveal the specific products that have moved towards intra industry trade.

HS 28: Products in Chapter 28 Inorganic Chemicals have a GL index value of 87% in the post period as compared to almost 0 in the pre period. In this chapter Pakistan is a major exporter of Caustic Soda (HS 281512) and Soda Ash (HS 283620) to India and imports Aluminum Hydroxide (HS 281830) which is used for water purification, dying and as an antacid. Other major inorganic chemicals imported from India include (1)Dithionites and Sulphoxylates (HS 283190) used for medicinal purposes; (2)Sodium Dithionites (HS 283110) used as a dying, bleaching and reducing agent ; (3) Chlorates (HS 282919) used in match sticks and fireworks.

HS 29: Our empirical analysis shows that there was vertical intra industry trade in organic chemicals. In the post period we see that the GL Index increased to 14%. In this chapter Pakistan imports P-xylene (HS 290243) which is used in the production of Terephythalic acid (HS 291736). Terephythalic acid is then exported to India. Pakistan is also exporting Ethylene Dichloride (HS 290315) and Phythalic Anhydride (HS 291735) both are used in the manufacture of PVC. Other organic chemicals imported by Pakistan include O-Xylene (HS 290241) which is used for furniture varnishing.

HS 52: Cotton has also experienced an increase in intra industry trade in the post period with the value of the GL index at 48%. In this chapter Pakistan is mainly exporting 'Cotton not carded or combed' (HS 520100) and 'Twill weaven fabrics' (HS 520932). Pakistan is also importing the same HS 6 product categories from India indicating that there is horizontal intra industry trade. Pakistan is also an importer of cotton yarn (HS 520535) from India.

HS 74: Intra industry trade in this product category increased in the post period and the GL index rose from a value of 20% (in the pre period) to 74% in the post period. Pakistan is exporting copper scrap (HS 740400) to India and then imports copper sheets and plates (HS 740921) indicating vertical intra industry trade.

HS 90: The value of the GL index rose slightly from 46% in the pre period to 55% in the post period. Pakistan mainly exports surgical instruments i.e. Veterinary equipment (HS 901890) and dental equipment (HS 901849). These categories are Pakistan's major export items in surgical instruments to the world. Pakistan's major import item in this category is Lab Equipment (HS 903289).

The GL Index identifies 20 chapters (at the HS 2 digit level) that have GL-Index values greater than 50% in either pre or post time period. These chapters are listed in the table 39:

Table 39. *Intra Industry Trade between Pakistan and Sri Lanka*

HS Chapter	Description	Pre Period (2003)	Post period (2009)
08	Edible fruit, nuts, peel of citrus fruit, melons	81.73%	21.25%
09	Coffee, tea, mate and spices	40.45%	78.51%
21	Miscellaneous edible preparations	27.50%	93.33%
28	Inorganic chemicals, precious metal compound, isotopes	63.18%	79.65%
29	Organic chemicals	78.05%	0.00%
34	Soaps, lubricants, waxes, candles, modelling pastes	70.62%	4.67%
38	Miscellaneous chemical products	83.59%	36.50%
54	Manmade filaments	7.55%	51.45%
55	Manmade staple fibres	44.77%	1.99%
56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	-	100.00%
58	Special woven or tufted fabric, lace, tapestry etc	1.07%	81.59%
59	Impregnated, coated or laminated textile fabric	66.67%	0.00%
69	Ceramic products	76.19%	15.22%
72	Iron and steel	0%	75.47%
82	Tools, implements, cutlery, etc of base metal	88.89%	0.00%
84	Nuclear reactors, boilers, machinery, etc	71.43%	21.75%
90	Optical, photo, technical, medical, etc apparatus	63.89%	39.25%
94	Furniture, lighting, signs, prefabricated buildings	88.89%	58.82%
96	Miscellaneous manufactured articles	8.41%	98.59%
99	Commodities not elsewhere specified	34.48%	85.71%

In the post period Pakistan has moved towards intra industry trade in 9 products out of 20 products whereas in the remaining 6 products' intra industry trade has declined and they are moving towards inter industry trade. A more detailed empirical analysis at the HS 6 digit level is carried out for the chapters for which there are significant trade values.

HS 09: Products in Chapter 09 Coffee, tea, mate and spices have a GL index value of 78% in the post period as compared to 48% in the pre period. In this chapter Pakistan is a major exporter of Cumin seeds (HS 090930), Fennel or juniper seeds (HS 090950) and Fruits of genus capsicum, dried or crushed (HS 090420) to Sri Lanka and imports tea (HS 090240) and Nutmeg (HS 090810).

HS 21: Intra industry trade in this product category i-e Miscellaneous edible preparations increased in the post period and the GL index rose from a value of 27% (in the pre period) to 93% in the post period. Pakistan is exporting Mixed seasonings and sauces (HS 210390) to Sri Lanka and then imports Food preparations (HS 210690) and Yeasts (HS 210210). As these items are not included in the sensitive list of Sri Lanka under SAFTA, so that increase in intra-industry trade may be due to trade liberalization schedule under SAFTA.

HS 54: Man-made filaments has also experienced an increase in intra industry trade in the post period with the value of the GL index at 51%. In this chapter Pakistan is mainly exporting 'Woven fabrics' and importing synthetic threads so it indicates vertical intra industry trade, as Pakistan is importing synthetic threads and exporting the same product but at different stage of processing that is synthetic woven fabrics.

HS 58: This chapter falls under the category "Special woven or tufted fabric, lace, tapestry etc" and after the estimation it has been seen that the intra-industry trade has increased in post scenario to 82% approx. In this product category, Pakistan is mainly exporting Terry towels (HS 580219) and importing Labels and badges (HS 580790) that are used in wearing and apparel.

HS 72: Intra-industry trade in this product category has increased to 75% in post period. And Pakistan is mainly exporting wires of Iron (HS 721720) and importing Ferrous waste and scrap (HS 720449).

Intra Industry Trade between Pakistan and Bangladesh

The GL Index identifies 11 chapters (at the HS 2 digit level) that are having GL-Index values greater than 50% in either pre or post time period. These chapters are listed in the table 40.

Table 40. *Intra Industry Trade between Pakistan and Bangladesh*

HS Chapter	Description	Pre Period (2003)	Post period (2009)
21	Miscellaneous edible preparations	6.75%	64%
23	Residues, wastes of food industry, animal fodder	94.44%	0%
30	Pharmaceutical products	68.63%	23%
40	Rubber and articles thereof	27.06%	70%
49	Printed books, newspapers, pictures etc	16.67%	100%
58	Special woven or tufted fabric, lace, tapestry etc	17.02%	95%
61	Articles of apparel, accessories, knit or crochet	0%	90%
73	Articles of iron or steel	37.60%	96%
74	Copper and articles thereof	0%	100%
85	Electrical, electronic equipment	29.39%	73%
96	Miscellaneous manufactured articles	56.66%	72%

In the post period out of 11 products in 9 products of Pakistan have moved towards intra industry trade whereas in the remaining 2 products' intra industry trade has declined and they are moving towards inter industry trade.

A more detailed empirical analysis at the HS 6 digit level is carried out for the chapters that are having more than 100 thousand trade value in either of the sample period (2003 or 2009) to reveal the specific products that have moved towards intra industry trade.

HS 21: In this product category (Miscellaneous edible preparations), the intra industry trade has moved up to 64%. The

products, which Pakistan is mainly exporting to Bangladesh are Soya sauce (HS 210310) and Food preparations (HS 210690) and majorly importing Food preparations (HS 210690) indicating horizontal intra-Industry trade.

HS 40: This chapter falls under the category "Rubber and articles thereof" and after the estimation it is noticed that the intra-industry trade has increased in post to 70%. In this product category, Pakistan is mainly exporting Pneumatic tires (HS 401140) and Inner tubes or rubber (HS 401390) and importing Natural rubber in smoked sheets (HS 400121) that are used in wearing and apparel. So basically Pakistan is importing rubber in raw form and exporting finished good to Bangladesh, indicating vertical intra industry trade.

HS 61: Articles of apparel and clothing, knitted or crocheted has also experienced an increase in intra industry trade in the post period with the value of the GL index rose to 90%. In this chapter Pakistan is mainly exporting 'Shawls and scarfs (HS 611710)' and 'Women suit, of other textiles materials, knitted (HS 610419)' and importing T-shirts, singlets, vest of other textile material (HS 610990).

5. Conclusion and Recommendations

The Pakistan's regional economic relations in South-Asia have strengthened over the years, particularly before the Implementation of South-Asia Free Trade Agreement (SAFTA). However, the current size of trade between the SAARC countries is low compared to the size and structural complementarities of the regional economies.

In this context, the present paper analyses trade relations and future areas of co-operation between Pakistan and rest of the SAARC countries. The increase in merchandise trade only in absolute term within the SAARC region has been mainly because of the changing demand structures and comparative advantages of economies in complementary sectors.

Pakistan's inter-regional exports in South Asia are dominated by basic foods and agricultural products. The import demand for these products fluctuates widely with domestic supply conditions, and the South Asian governments apply arbitrary policies to maintain stable domestic prices. The imports are allowed with domestic shortfalls, and restrictions are imposed on them when domestic supply is stable. With the exception of India, most other countries depend on a few products for export revenue, limiting the possibility of their export expansion. The import demand depends on the level of development, and the demand for agricultural products is subject to ad hoc policy changes depending on domestic supply changes and political circumstances. Exporting countries find it difficult to absorb the changed demand, and hence need careful scrutiny and negotiations at the regional level.

The analysis of competitiveness and complementarities of Pakistan in SAARC region reveals that there has been a distinct

change in trade patterns of Pakistan with its partners with respects to intraregional trade. Pakistan's exports mainly constitute low value-added industrial products and agricultural products, while Pakistan's imports from SAARC largely consist of relatively raw material and low value-added products.

The analysis of revealed comparative advantage (RCAs) Indices at both the aggregated and disaggregated levels shows that Pakistan competitive basket changed overtime and has been specializing in a few products which are highly competitive as SAARC regions exports are less diversified. Moreover, Pakistan shows declining comparative advantage in SAARC region mainly in Cereals, Ceramic Products, Fish, pharmaceutical products, precious stones (pearls) and photographic goods.

The analysis of Grubel-lloyd Index (GLI) at the disaggregated level shows that there are some industries where Pakistan has comparative advantage in different products, pointing to opportunities for intra-industry trade. The intra-industry trade (IIT) analysis shows that IIT is low in the top traded product groups and high in some products where trading is low. This offers huge opportunity for intra-industry trade if sector-specific barriers are removed along with general barriers.

Further, the increasing trade complementarity index (TCI) between each SAARC member with SAARC region as a whole shows that there has been drastic change increase in complementarily indices of all four major trading partners India, Pakistan, Bangladesh and Sri Lanka with SAARC region. The observed pattern of the analysis implies that Pakistan' trade complementarities with its selected trade partners in the SAARC region has increased overtime although with comparatively low level. The low values of trade complementarity in the region are due to the fact that industrial structure of south-Asian countries more or less similar and most of the trade is based on raw materials especially in agriculture products, minerals and semi manufactured goods.

Pakistan's exports complementarity indices with Bangladesh and Sri Lanka increased with comparative advantage advocate that Pakistan's trade with these countries certainly has a potential to grow over time, but the converse is not true. But in the backdrop of Pakistan's low level of trade complementarity with its major trading partner in South Asia i.e. India with which Pakistan's exports complement is not reasonably well to its partner imports, although the degree has been rising overtime. However, in case of India's exports it complements rationally well with Pakistan's imports and the trade potential is in favour of India with significant comparative advantage overtime. So it

becomes imperative to think that intraregional trade has a potential to expand in South Asia.

The trade complementarity analysis also conclude that the South Asian countries are at different stages of production within an industry, and the exports of one country complements reasonably well with the imports of other country, which results in strengthening the potential of intra-regional trade in South-Asia in future. In order to assess, which industry or sector is gaining potential in the South Asian trade, this issue is examined in the subsequent section of the paper using Grubel Lloyd Index or Intra-industry trade indices for the selected countries.

Appendix

Appendix 1. *Chapters having RCA value greater than 1 in pre period*

Code	Product label	Average RCA (2003-06)
'63	Other made textile articles, sets, worn clothing etc	58.56
'52	Cotton	43.80
'57	Carpets and other textile floor coverings	15.04
'10	Cereals	13.38
'42	Articles of leather, animal gut, harness, travel goods	11.47
'61	Articles of apparel, accessories, knit or crochet	8.93
'41	Raw hides and skins (other than furskins) and leather	7.13
'11	Milling products, malt, starches, inulin, wheat gluten	6.77
'54	Manmade filaments	5.97
'36	Explosives, pyrotechnics, matches, pyrophorics, etc	5.86
'13	Lac, gums, resins, vegetable saps and extracts nes	5.55
'62	Articles of apparel, accessories, not knit or crochet	5.51
'95	Toys, games, sports requisites	3.22
'55	Manmade staple fibres	3.03
'60	Knitted or crocheted fabric	3.01
'17	Sugars and sugar confectionery	2.91
'58	Special woven or tufted fabric, lace, tapestry etc	2.60
'14	Vegetable plaiting materials, vegetable products nes	2.54
'05	Products of animal origin, nes	2.19
'56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	2.14
'25	Salt, sulphur, earth, stone, plaster, lime and cement	1.98
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	1.70
'08	Edible fruit, nuts, peel of citrus fruit, melons	1.54
'96	Miscellaneous manufactured articles	1.41
'07	Edible vegetables and certain roots and tubers	1.40
'15	Animal,vegetable fats and oils, cleavage products, etc	1.28
'64	Footwear, gaiters and the like, parts thereof	1.26
'53	Vegetable textile fibres nes, paper yarn, woven fabric	1.25

Appendix 2. *Chapters having RCA value greater than 1 in post period*

Code	Product label	Average RCA (2007-09)

'63	Other made textile articles, sets, worn clothing etc	54.74
'52	Cotton	52.95
'10	Cereals	16.28
'42	Articles of leather, animal gut, harness, travel goods	11.25
'57	Carpets and other textile floor coverings	10.25
'41	Raw hides and skins (other than furskins) and leather	9.70
'25	Salt, sulphur, earth, stone, plaster, lime and cement	9.18
'61	Articles of apparel, accessories, knit or crochet	8.00
'55	Manmade staple fibres	7.94
'62	Articles of apparel, accessories, not knit or crochet	5.84
'36	Explosives, pyrotechnics, matches, pyrophorics, etc	5.47
'13	Lac, gums, resins, vegetable saps and extracts nes	5.41
'14	Vegetable plaiting materials, vegetable products nes	4.03
'17	Sugars and sugar confectionery	3.20
'11	Milling products, malt, starches, inulin, wheat gluten	3.01
'05	Products of animal origin, nes	2.58
'60	Knitted or crocheted fabric	2.09
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	2.05
'08	Edible fruit, nuts, peel of citrus fruit, melons	1.77
'95	Toys, games, sports requisites	1.75
'54	Manmade filaments	1.56
'22	Beverages, spirits and vinegar	1.53
'58	Special woven or tufted fabric, lace, tapestry etc	1.47
'78	Lead and articles thereof	1.35
'15	Animal,vegetable fats and oils, cleavage products, etc	1.30
'56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	1.12
'53	Vegetable textile fibres nes, paper yarn, woven fabric	1.11
'07	Edible vegetables and certain roots and tubers	1.08
'89	Ships, boats and other floating structures	1.08
'64	Footwear, gaiters and the like, parts thereof	1.07
'82	Tools, implements, cutlery, etc of base metal	1.02

Appendix 3. *Chapters having RRCA value greater than 1 in pre period*

Code	Product label	Average RRCA (2003-06)

'52	Cotton	29.29
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	21.19
'63	Other made textile articles, sets, worn clothing etc	15.98
'07	Edible vegetables and certain roots and tubers	10.61
'08	Edible fruit, nuts, peel of citrus fruit, melons	10.47
'61	Articles of apparel, accessories, knit or crochet	8.45
'13	Lac, gums, resins, vegetable saps and extracts nes	5.12
'41	Raw hides and skins (other than furskins) and leather	4.90
'10	Cereals	4.61
'17	Sugars and sugar confectionery	4.15
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	3.94
'54	Manmade filaments	3.70
'09	Coffee, tea, mate and spices	3.36
'57	Carpets and other textile floor coverings	3.32
'30	Pharmaceutical products	3.21
'20	Vegetable, fruit, nut, etc food preparations	2.92
'11	Milling products, malt, starches, inulin, wheat gluten	2.77
'42	Articles of leather, animal gut, harness, travel goods	2.67
'60	Knitted or crocheted fabric	2.53
'19	Cereal, flour, starch, milk preparations and products	2.50
'95	Toys, games, sports requisites	2.14
'64	Footwear, gaiters and the like, parts thereof	2.07
'62	Articles of apparel, accessories, not knit or crochet	2.00
'58	Special woven or tufted fabric, lace, tapestry etc	1.87
'51	Wool, animal hair, horsehair yarn and fabric thereof	1.78
'78	Lead and articles thereof	1.58
'14	Vegetable plaiting materials, vegetable products nes	1.40
'39	Plastics and articles thereof	1.07
'18	Cocoa and cocoa preparations	1.04
'73	Articles of iron or steel	1.00

Appendix 4. *Chapters having RRCA value greater than 1 in post period*

Code	Product label	Average RRCA (2007-09)
'52	Cotton	48.26
'93	Arms and ammunition, parts and accessories thereof	41.93
'63	Other made textile articles, sets, worn clothing etc	18.40
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	17.45
'41	Raw hides and skins (other than furskins) and leather	12.13
'08	Edible fruit, nuts, peel of citrus fruit, melons	11.70
'20	Vegetable, fruit, nut, etc food preparations	8.64
'61	Articles of apparel, accessories, knit or crochet	8.15
'10	Cereals	7.96
'11	Milling products, malt, starches, inulin, wheat gluten	7.16
'22	Beverages, spirits and vinegar	6.79
'60	Knitted or crocheted fabric	6.41
'78	Lead and articles thereof	6.40
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	6.06
'25	Salt, sulphur, earth, stone, plaster, lime and cement	6.05
'43	Furskins and artificial fur, manufactures thereof	5.63
'17	Sugars and sugar confectionery	5.29
'09	Coffee, tea, mate and spices	4.44
'55	Manmade staple fibres	3.19
'51	Wool, animal hair, horsehair yarn and fabric thereof	3.16
'30	Pharmaceutical products	2.84
'62	Articles of apparel, accessories, not knit or crochet	2.67
'57	Carpets and other textile floor coverings	2.56
'07	Edible vegetables and certain roots and tubers	2.46
'70	Glass and glassware	1.92
'42	Articles of leather, animal gut, harness, travel goods	1.81
'05	Products of animal origin, nes	1.56
'64	Footwear, gaiters and the like, parts thereof	1.42
'16	Meat, fish and seafood food preparations nes	1.39
'95	Toys, games, sports requisites	1.34
'54	Manmade filaments	1.26
'24	Tobacco and manufactured tobacco substitutes	1.19
'34	Soaps, lubricants, waxes, candles, modelling pastes	1.13
'56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	1.12
'74	Copper and articles thereof	1.10
'14	Vegetable plaiting materials, vegetable products nes	1.06
'21	Miscellaneous edible preparations	1.03

Appendix 5. *Chapters having RMA value greater than 1 in pre period*

Code	Product label	Average RMA (2003-06)
'97	Works of art, collectors pieces and antiques	104.06
'87	Vehicles other than railway, tramway	25.55
'18	Cocoa and cocoa preparations	21.74
'30	Pharmaceutical products	17.79
'19	Cereal, flour, starch, milk preparations and products	15.14
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	12.59
'20	Vegetable, fruit, nut, etc food preparations	11.07
'91	Clocks and watches and parts thereof	10.09
'80	Tin and articles thereof	9.16
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	8.26
'08	Edibe fruit, nuts, peel of citrus fruit, melons	6.82
'07	Edible vegetables and certain roots and tubers	6.43
'51	Wool, animal hair, horsehair yarn and fabric thereof	6.09
'09	Coffee, tea, mate and spices	4.44
'79	Zinc and articles thereof	4.27
'70	Glass and glassware	3.95
'73	Articles of iron or steel	3.75
'33	Essential oils, perfumes, cosmetics, toileteries	3.48
'83	Miscellaneous articles of base metal	3.28
'37	Photographic or cinematographic goods	3.25
'21	Miscellaneous edible preparations	3.18
'84	Machinery, nuclear reactors, boilers, etc	3.16
'75	Nickel and articles thereof	3.09
'29	Organic chemicals	3.09
'06	Live trees, plants, bulbs, roots, cut flowers etc	2.90
'34	Soaps, lubricants, waxes, candles, modelling pastes	2.78
'38	Miscellaneous chemical products	2.72
'39	Plastics and articles thereof	2.54
'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	2.47
'99	Commodities not elsewhere specified	2.24
'78	Lead and articles thereof	2.24
'24	Tobacco and manufactured tobacco substitutes	2.13
'48	Paper & paperboard, articles of pulp, paper and board	1.94
'28	Inorganic chemicals, precious metal compound, isotopes	1.93
'74	Copper and articles thereof	1.82
'27	Mineral fuels, oils, distillation products, etc	1.76
'43	Furskins and artificial fur, manufactures thereof	1.73
'93	Arms and ammunition, parts and accessories thereof	1.69
'49	Printed books, newspapers, pictures etc	1.68
'64	Footwear, gaiters and the like, parts thereof	1.62
'35	Albuminoids, modified starches, glues, enzymes	1.58
'94	Furniture, lighting, signs, prefabricated buildings	1.39
'85	Electrical, electronic equipment	1.35
'17	Sugars and sugar confectionery	1.33
'72	Iron and steel	1.28
'81	Other base metals, cermets, articles thereof	1.24
'60	Knitted or crocheted fabric	1.11
'76	Aluminium and articles thereof	1.05

Appendix 6. *Chapters having RMA value greater than 1 in pre period*

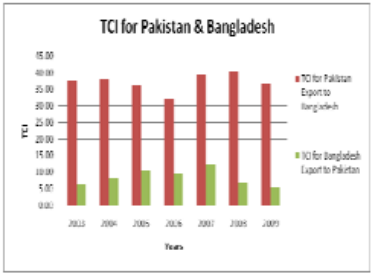
Code	Product label	Average RMA (2007-09)
'43	Furskins and artificial fur, manufactures thereof	202.07
'93	Arms and ammunition, parts and accessories thereof	71.45
'06	Live trees, plants, bulbs, roots, cut flowers etc	22.41
'20	Vegetable, fruit, nut, etc food preparations	22.10
'87	Vehicles other than railway, tramway	11.76
'30	Pharmaceutical products	11.47
'80	Tin and articles thereof	10.99
'51	Wool, animal hair, horsehair yarn and fabric thereof	9.45
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	8.75
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	8.51
'75	Nickel and articles thereof	7.75
'70	Glass and glassware	7.13
'18	Cocoa and cocoa preparations	6.92
'08	Edible fruit, nuts, peel of citrus fruit, melons	6.69
'79	Zinc and articles thereof	6.54
'29	Organic chemicals	5.87
'38	Miscellaneous chemical products	5.76
'97	Works of art, collectors pieces and antiques	5.59
'09	Coffee, tea, mate and spices	5.48
'24	Tobacco and manufactured tobacco substitutes	5.24
'22	Beverages, spirits and vinegar	4.75
'33	Essential oils, perfumes, cosmetics, toileteries	4.62
'21	Miscellaneous edible preparations	4.39
'78	Lead and articles thereof	3.91
'34	Soaps, lubricants, waxes, candles, modelling pastes	3.84
'74	Copper and articles thereof	3.80
'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	3.73
'11	Milling products, malt, starches, inulin, wheat gluten	3.30
'28	Inorganic chemicals, precious metal compound, isotopes	3.26
'48	Paper & paperboard, articles of pulp, paper and board	3.13
'60	Knitted or crocheted fabric	3.07
'73	Articles of iron or steel	2.93
'16	Meat, fish and seafood food preparations nes	2.54
'07	Edible vegetables and certain roots and tubers	2.41
'83	Miscellaneous articles of base metal	2.12
'49	Printed books, newspapers, pictures etc	1.96
'35	Albuminoids, modified starches, glues, enzymes	1.91
'84	Machinery, nuclear reactors, boilers, etc	1.91
'46	Manufactures of plaiting material, basketwork, etc.	1.81
'76	Aluminium and articles thereof	1.69
'39	Plastics and articles thereof	1.46
'37	Photographic or cinematographic goods	1.43
'64	Footwear, gaiters and the like, parts thereof	1.42
'88	Aircraft, spacecraft, and parts thereof	1.28
'41	Raw hides and skins (other than furskins) and leather	1.25
'23	Residues, wastes of food industry, animal fodder	1.25
'85	Electrical, electronic equipment	1.10
'92	Musical instruments, parts and accessories	1.09
'59	Impregnated, coated or laminated textile fabric	1.09
'19	Cereal, flour, starch, milk preparations and products	1.09
'17	Sugars and sugar confectionery	1.08
'56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	1.07
'72	Iron and steel	1.06
'61	Articles of apparel, accessories, knit or crochet	1.01

Appendix 7.

TCI between Pakistan and Bangladesh:

TCI for Pakistan & Bangladesh		
Year	TCI for Pakistan Export to Bangladesh	TCI for Bangladesh Export to Pakistan
2003	37.77225	6.30188
2004	38.31013	8.33792
2005	36.38853	10.53293
2006	32.47474	9.37292
2007	39.48677	12.24659
2008	40.67802	6.50608
2009	36.91237	5.58851

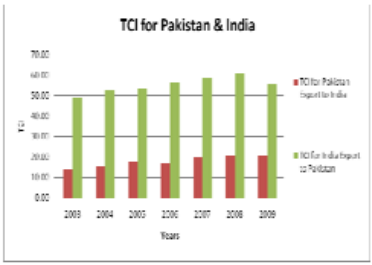
Source: Trade Map "Author's own calculations"



TCI between Pakistan and India:

TCI for Pakistan & India		
Year	TCI for Pakistan Export to India	TCI for India Export to Pakistan
2003	13.59727	48.73541
2004	15.56111	52.30668
2005	17.32047	53.26074
2006	16.78718	56.55237
2007	19.85050	58.31481
2008	20.57264	60.94548
2009	20.65627	55.78094

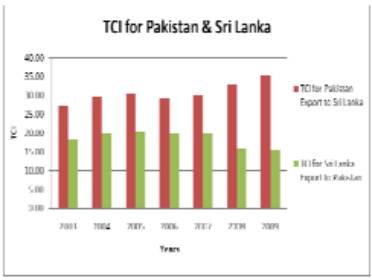
Source: Trade Map "Author's own calculations"



TCI between Pakistan and Sri Lanka:

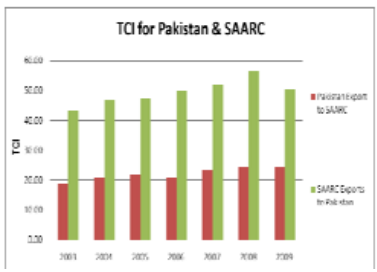
TCI for Pakistan & Sri Lanka		
Year	TCI for Pakistan Export to Sri Lanka	TCI for Sri Lanka Export to Pakistan
2003	27.17567	18.30392
2004	29.67247	19.97010
2005	30.64509	20.36631
2006	29.27754	19.81374
2007	30.24549	20.16836
2008	32.87863	15.90374
2009	35.20846	15.62013

Source: Trade Map "Author's own calculations"



TCI between Pakistan and SAAC Region:

TCI for Pakistan and SAARC		
Year	TCI for Pakistan Export to SAARC	TCI for SAARC Exports to Pakistan
2003	18.62773	43.08382
2004	20.73545	46.71780
2005	21.53354	47.15581
2006	20.74127	49.87008
2007	23.51039	51.73328
2008	24.12924	56.21553
2009	24.25344	50.33506



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e-ISBN: 978-605-2132-87-6 (e-Book)
KSP Books 2018
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Over the past decade Pakistan remained involved in two major trade agreements with in the South Asia (Pakistan & Sri-Lanka FTA and SAFTA). It is meaningful from an operational and policy perspective to evaluate Pakistan's trade performance in South Asia against its objectives of greater trade integration and suggest policy interventions to improve its effectiveness. In order to achieve this objective, current study evaluates the Pakistan's overall and chapter-wise trade performance with SAARC major SAARC economies for the last seven years (2003-09). This study has been disaggregated into two parts: In the first part of the study, an assessment of trade performance of SAARC members is carried out with respect to the rest of the world. Pakistan's trade performance vis-à-vis other SAARC members is the focus of this part. In the second part Pakistan's trade performance in South Asia has been analyzed and policy interventions have been suggested to improve its effectiveness. Certain trade indicators like Trade Complementarity Index (TCI), Trade Specialization Index (TSI), Grubel Lloyd Index (GLI), Revealed Comparative Analysis (RCA), Bilateral Revealed Comparative Analysis BRCAs and Revealed Market Access (RMA) have been employed to achieve the above objectives.

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KSP Books

e-ISBN
978-605-2132-87-6
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